AUGUST 10, 1946

Railway Age

Founded in 1856

ONE MAN CAN CLOSE HALF TON DROP ENDS!

EASILY AND SAFELY...

with NEW WINE DROP END BALANCERS

ANOTHER WINE IMPROVEMENT FOR BETTER RAILROADING

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«THE WINE RAILWAY APPLIANCE COMPANY • TOLEDO 9, OHIO»

Car Department officers attending the A.A.R. Purchases and Stores and Mechanical Division Convention in Chicago were in complete agreement on the indisputable fact that the trend toward the use of UNIT TRUCKS for freight cars is growing from year to year. . . During the first six months of 1946 over 27% of all freight cars ordered for domestic service will be equipped with UNIT TRUCKS.

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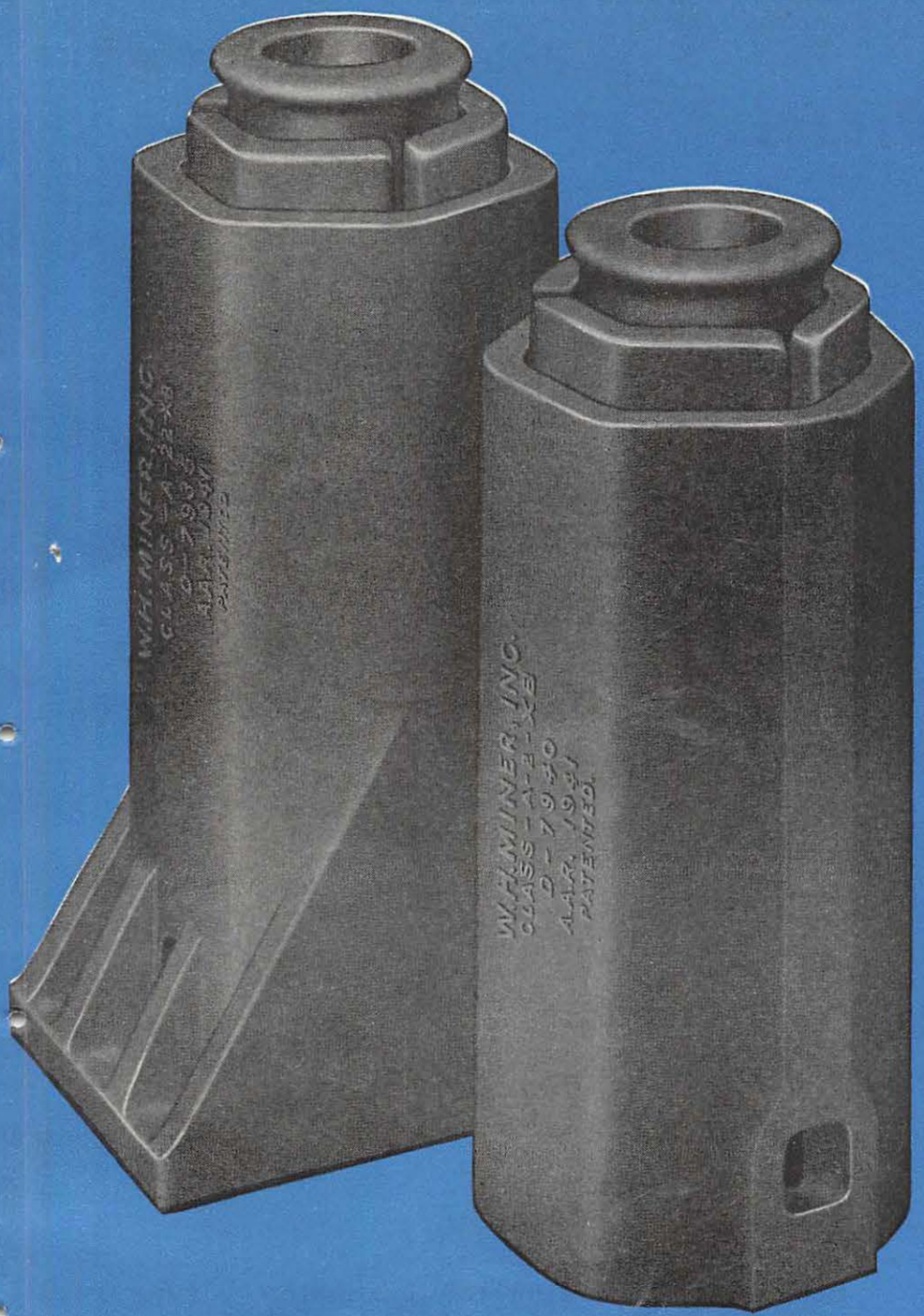


STURDY

POSITIVE IN ACTION

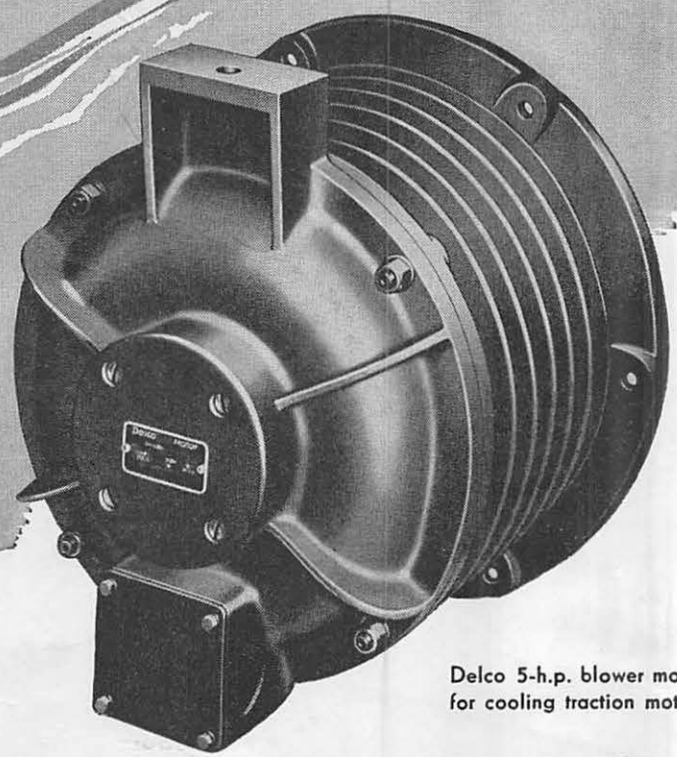
ABSOLUTELY RELIABLE

MINER Friction Draft Gears

W. H. MINER, INC. CHICAGO

Power by Diesel...

cooling by DELCO



Delco 5-h.p. blower motor for cooling traction motors

Delco 12-h.p. blower motor, vertical mounting, to cool grids in electric braking.

Delco DC auxiliary generator for Diesel locomotives.

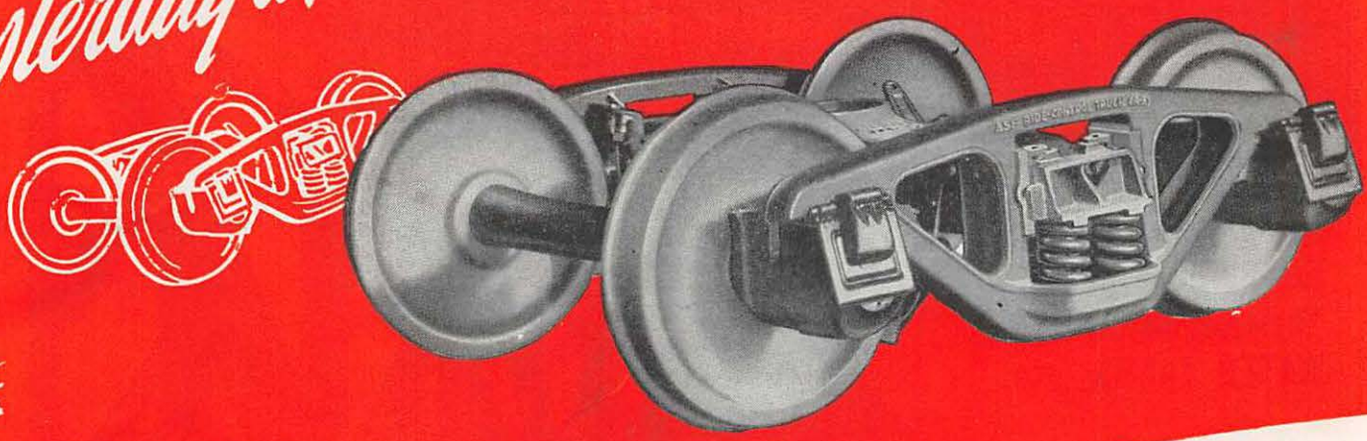
Delco compressor motor for car air-conditioning.

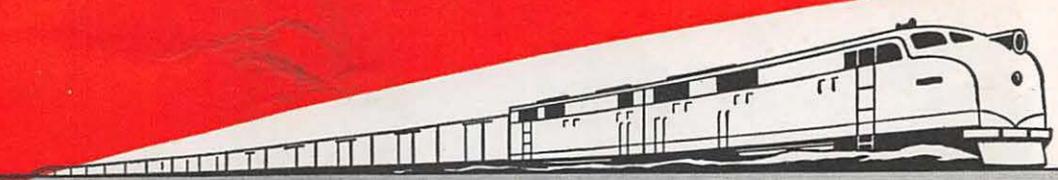
Dependable cooling for traction motors is supplied by these specially designed Delco motors, driving blowers located "fore and aft" on the section. The rugged, compact construction is typical of Delco motors and generators for railroad use.

DELCO MOTORS

DIVISION OF GENERAL DELCO PRODUCTS DAYTON, OHIO MOTORS CORPORATION

Yesterday a "Plus" TODAY it's a MUST!





These Easy-Riding Freight Car Trucks help keep Revenue on the Rails

Shippers like the arrival of lading in better condition. Railroads like the excellent "tracking" characteristics at modern speeds; the lower maintenance on rolling stock and roadbed; the fewer damage claims.

That's why, in less than three years, "Ride-Control" has grown from a *name* to nation-wide acceptance. It's the modern freight car truck for cars of all types; for all loads; for all *speeds.*

Already, more than 27,000 car sets are in service or on order for 53 railroads and private car owners. Users have re-ordered as many as eight times. There could be no *finer* testimonial for the softer, smoother, easy ride these better freight car trucks deliver. We'll be glad to give you all the facts.

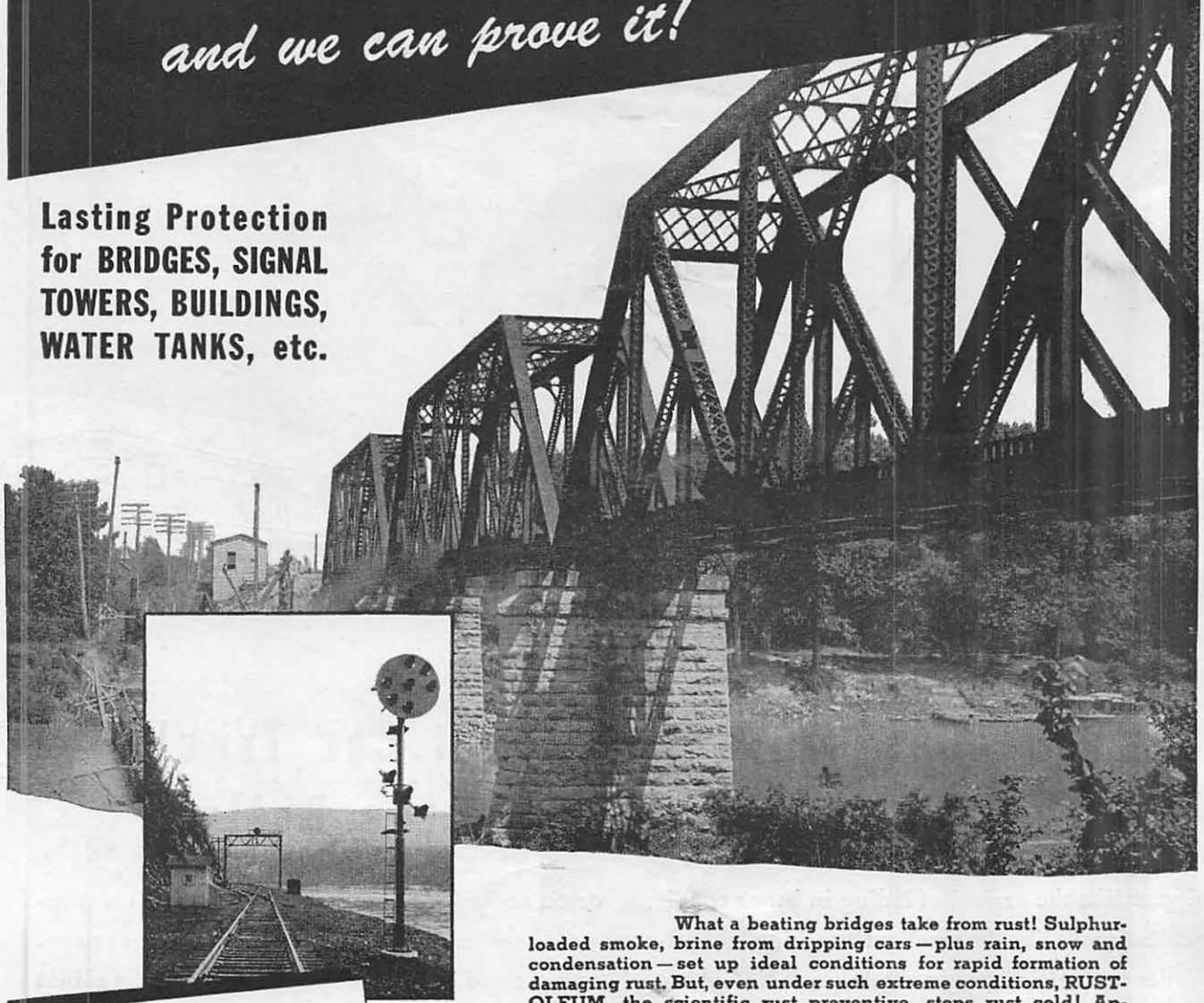
A·S·F *Ride-Control* TRUCK (A-3)
NO SPRING PLATES • NO SPRING PLANKS
LONG SPRING TRAVEL • CONSTANT FRICTION CONTROL

AMERICAN STEEL FOUNDRIES

NO TOUGHER JOB Than Stopping Rust Here But RUST-OLEUM DOES IT . . .

and we can prove it!

Lasting Protection for BRIDGES, SIGNAL TOWERS, BUILDINGS, WATER TANKS, etc.



What a beating bridges take from rust! Sulphur-loaded smoke, brine from dripping cars—plus rain, snow and condensation—set up ideal conditions for rapid formation of damaging rust. But, even under such extreme conditions, RUST-OLEUM, the scientific rust preventive, stops rust cold! Applied to the surface, even where rust already has a grip, it penetrates right through to virgin metal—actually incorporates rust right into the coating—and spreads a protective cover that lasts for years. This coating is tough, elastic and air-tight—won't blister, crack or peel off.

The result is year after year of savings in maintenance time, labor and material because bridges, signal towers and other right-of-way structures need less attention.

The rust-preventing qualities of RUST-OLEUM have been conclusively proved in practical tests. For years this remarkable preparation has been saving money for American Railroads. It will pay you to investigate RUST-OLEUM now. ***Write today for Catalog 145 for recommended applications.***

Check These Features:

- Apply directly over any rusted surface. Simply wire brush to remove loose scale, blisters and dirt.
- Rust-Oleum penetrates the remaining rust and spreads an unbroken protective film over the entire surface.
- It's easy to apply by brush, dip or spray—Saves time, money and labor.
- Excellent coverage . . . Gallons of economy.

RUST-OLEUM CORPORATION

2415 Oakton Street Evanston, Illinois

BALDWIN

CONTINUOUS THROTTLE CONTROL

means fewer motions and smoother acceleration

The Baldwin system of continuous throttle control enables the operator to start the locomotive and accelerate up to full running speed by smoothly moving the throttle lever. Power is never cut off at any point and there is no transition lever to manipulate. The result is smooth, continuous acceleration of the locomotive, less damage to drawbars, thereby saving wear and tear on equipment.

Compare this with other controls which necessitate four settings of the transition lever and frequent retarding of the throttle lever. The result is uneven acceleration of the locomotive.

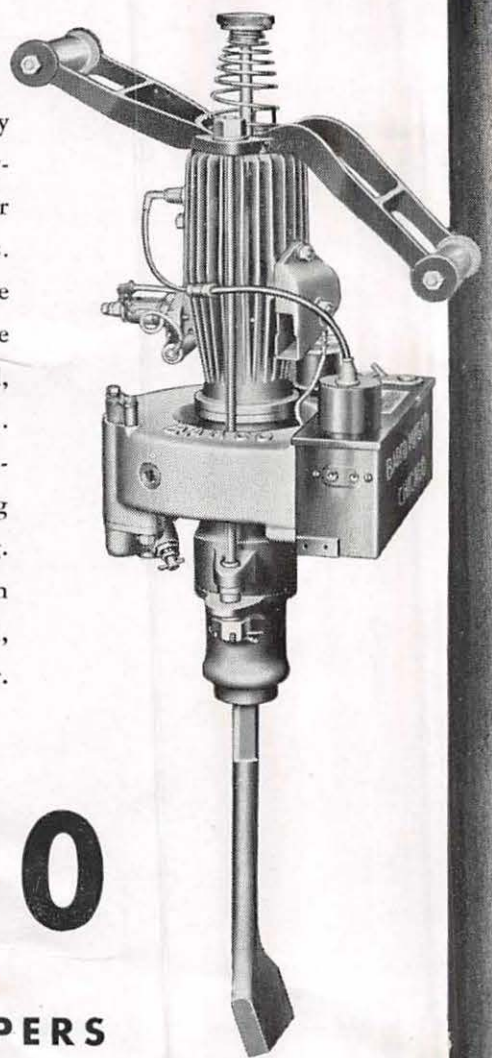
Continuous throttle control is one of the many advantages found in Baldwin diesel-electric Locomotives.

THE **BALDWIN-**
LOCOMOTIVE WORKS, PHILADELPHIA

Westinghouse
ELECTRIC CORPORATION, EAST PITTSBURGH, PA.

TAMPS THE BALLAST

Fast and Firmly!



Harassed maintenance-of-way chiefs are putting Barco Tytampers in the hands of their hard-working labor forces. Foremen and workers alike are covering more trackage with this light, self-contained, easily-operated powerhouse... handling spot or gang tamping, cribbing, breaking, drilling —the toughest kind of going. Write for more information about this critically needed, economical, tireless worker.

BARCO

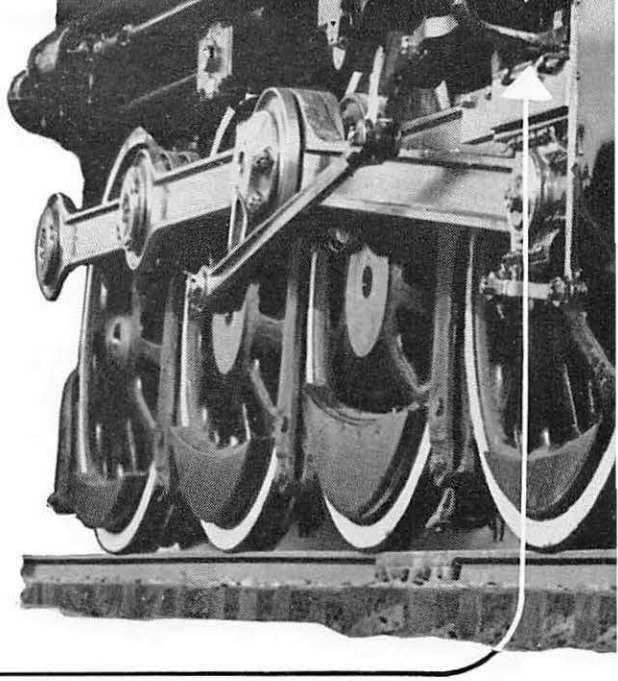
UNIT TYTAMPERS

FREE ENTERPRISE—THE CORNERSTONE OF AMERICAN PROSPERITY

BARCO MANUFACTURING CO., NOT INC. · 1800 Winnemac Avenue, Chicago 40, Illinois

Facts About Steam Locomotive Parts

Forging



What happens here... may make a huge difference in service here!

Fifth Advertisement of an Important Series

THE saying "All horses are quadrupeds, but all quadrupeds are not horses" applies sharply to many things. For instance, the fact that a man can forge steel is no sign that he is qualified to produce steel forgings for ALCO locomotives.

The ALCO men who make steel forgings in ALCO shops know exactly what characteristics must be developed for each specific ALCO locomotive part.

They ought to. They do nothing else. *And it makes a difference* in ALCO locomotives—and in the cost and quality of ALCO locomotive replacement parts!

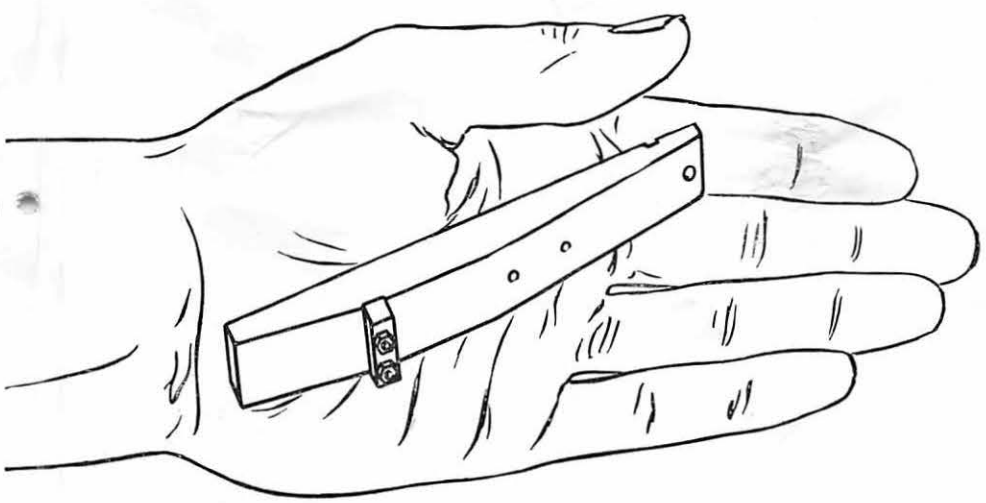
Some ALCO men are so specialized that they perform only *one* operation on *one kind of part*. Naturally, they are experts.

The 1,500-ton forging press, shown here breaking down an ingot in an ALCO shop, is but one machine in a highly co-ordinated ALCO setup. Because of this co-ordination of specialist ALCO craftsmen with specialized ALCO machines, genuine ALCO parts give you safety and service—the greatest possible value per dollar! American Locomotive Company, 30 Church Street, New York 8, N. Y.

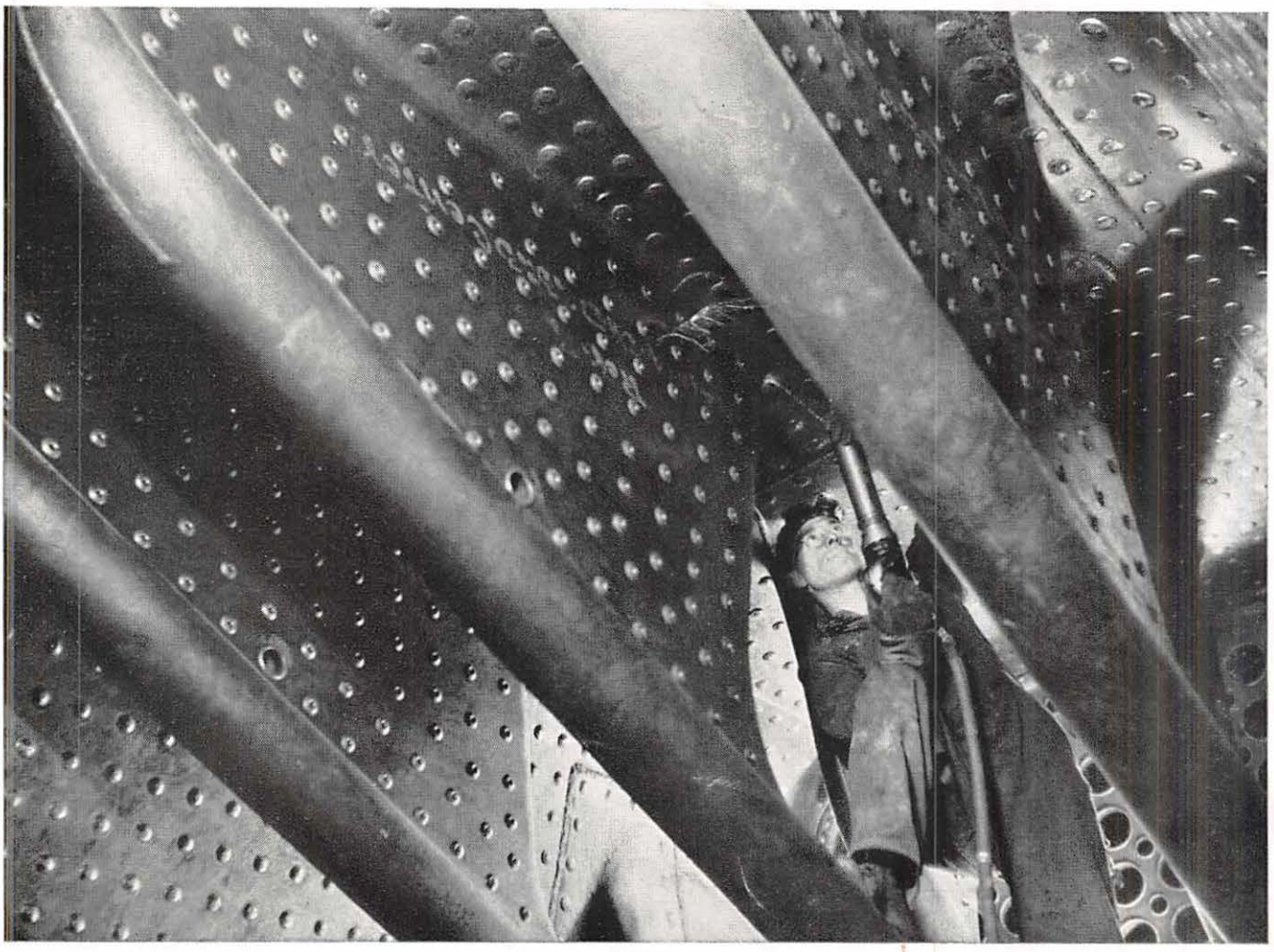
American Locomotive

Alco

THE MARK OF MODERN ENGINEERING



Your laboratory will show MAYARI STAYBOLT STEELS *are stronger*



Have your physical laboratory try out a specimen of Mayari staybolt steel in a tensile-testing machine and watch the results. You will find that its tensile strength is greater than that of staybolt materials heretofore in general use.

This added strength is needed to take care of the greater loads and increased boiler pressures in modern locomotives. Mayari Staybolt 50 Steel has a minimum tensile strength of 50,000 psi while Mayari Staybolt 55 Steel has a minimum of 55,000 psi.

Along with this strength Mayari has excellent ductility and fatigue resistance. This means good heading properties and ability to withstand varying stresses. Tests show a minimum elongation of 32 per cent in 2 in., and a minimum reduction of area of 62 per cent.

And with these physical advantages Mayari sells for less than some conventional types of staybolt materials. Leading American railroads have found that Mayari does a better job at lower cost. If you are using other staybolt materials, test Mayari in your laboratory; then try it out in your motive power.

BETHLEHEM STEEL

BETHLEHEM STEEL COMPANY
BETHLEHEM, PA.

On the Pacific Coast
Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation

FOR GREATER STRENGTH
without more weight

–no other material can equal

ALLOY STEELS

When used for locomotive side rods such as this, Republic Alloy Steels insure highest strength for the weight involved—and provide uniform hardenability that produces wear-resistant surfaces.

When power and speed of locomotives are stepped up—and operating parts such as side rods, pins and bolts must be made stronger without increase in size or weight—it's a job for Republic Alloy Steels.

Alloy steels are the strongest of metals. Their exceptionally high strength-to-weight ratio assures the most efficient combination of these two properties.

But there are other good reasons for your use of alloy steels. They can be hardened uniformly and accurately to the greatest extremes of any material—hence are highly resistant to abrasion. They insure against non-hardened or soft spots in wearing surfaces.

Alloy steels also provide super-toughness to resist sudden shock, strain or reversal of stress. They resist fatigue, high temperatures, sub-zero cold and corrosion. They are the most dependable and the hardest working steels that money can buy.

Republic's wide experience as the world leader in the production of alloy steels is yours—to help you increase efficiency of equipment, to keep it out of the repair shop longer and to cut costs. Write us.

REPUBLIC STEEL CORPORATION
Alloy Steel Division • Massillon, Ohio
GENERAL OFFICES • CLEVELAND 1, OHIO
Export Department: Chrysler Building, New York 17, N. Y.

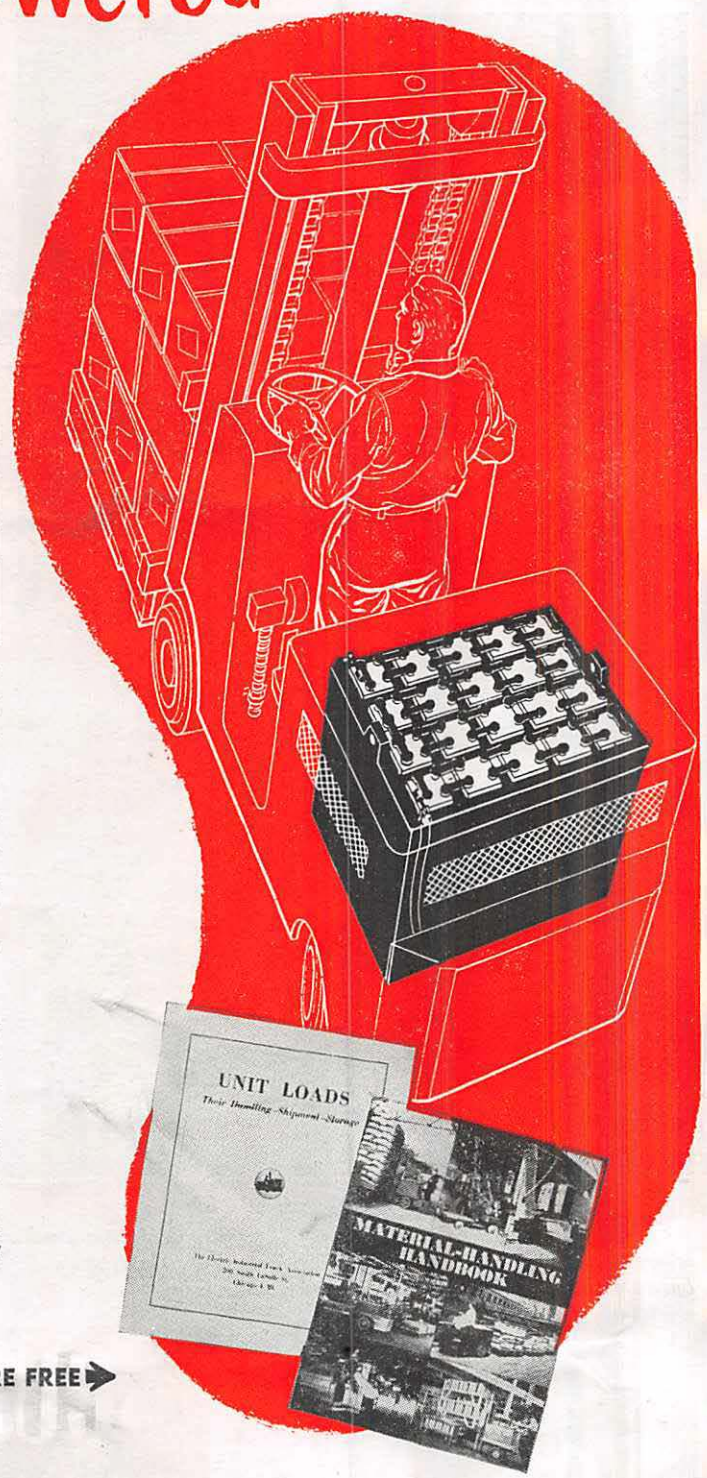
Republic
ALLOY STEELS

Also Carbon and Stainless Steels—Sheets—Plates—Pipe—Upson Bolts, Nuts and Rivets—Electrunite Boiler Tubes

When there's work to be done—efficiently . . . look to

Battery Powered

Industrial Trucks



Serving more than 300 fields of industry and distribution, electric industrial trucks perform material-handling tasks with a versatility and efficiency beyond those of any other system. You'll find the prime reason for this record in the following exclusive advantages of battery power—

PLANNED POWER RESERVE—with properly applied high-capacity batteries, you can have all the power you want, whenever you want it. Huge overload capacity, many times the normal output, delivers smooth surges of *extra* power for fast acceleration, for climbing ramps or handling the heaviest loads quickly and continually.

LOWEST COST ENERGY—Electric power—tops in reliability and economy for all industrial power requirements—excels as *mobile* power for material handling when used with efficient and trouble-free battery driven trucks.

24-HOUR OPERATION—month after month, year after year at *lowest* overall operating cost. On round-the-clock operations, the second and third shifts are furnished a fresh, cool ready-to-use power supply—no need for stand-by trucks. With shorter hours of use per day, batteries may remain in the trucks while charging.

BEST AND SAFEST EVERYWHERE—Battery power is quiet, clean and fume-free, eliminating product contamination. Other economy and fatigue-saving advantages include fingertip control, smooth effortless starting, safe tamper-proof speed, precise control when spotting loads, no idling cost in fuel or wear when not working.

These exclusive advantages are proved by the fact that *more than 90 per cent of the electric industrial trucks sold in the past twenty years are still in service.*

Ideas for immediate savings in the MATERIAL-HANDLING HANDBOOK and UNIT LOADS. **THEY'RE FREE** ➔

THE ELECTRIC INDUSTRIAL TRUCK ASSOCIATION

208A South La Salle Street, Chicago 4, Illinois

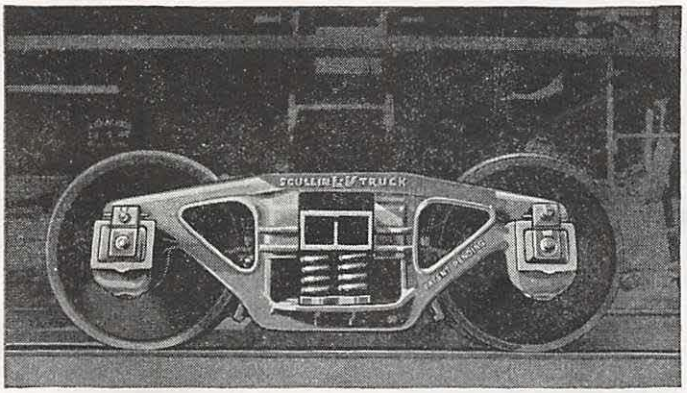
FREIGHT CARS WITH "SLEEPER" SMOOTHNESS...

The New

SCULLIN L-V TRUCK

LATERAL-VERTICAL CUSHIONED MOTION

TAKES THE "SWING AND SWAY" OUT OF YOUR FREIGHT



Designed to make higher speeds really *safe* for lading, cars and roadbed. Completely controls and cushions all lateral and vertical motion—necessary to provide ultimate riding qualities.

• Simple, trouble-free, easy to maintain • Eliminates lateral impacts • Maintains constant controlled truck alignment • Comparable to conventional freight car trucks in both price and weight • For complete details write:

ARMY NAVY

SCULLIN STEEL CO

SAINT LOUIS 10, MISSOURI

STEEL CASTING MANUFACTURERS SINCE 1899

NEW YORK • CHICAGO • PHILADELPHIA • CLEVELAND • ST. PAUL • BALTIMORE • RICHMOND, VA. • MEXICO CITY, D.F.

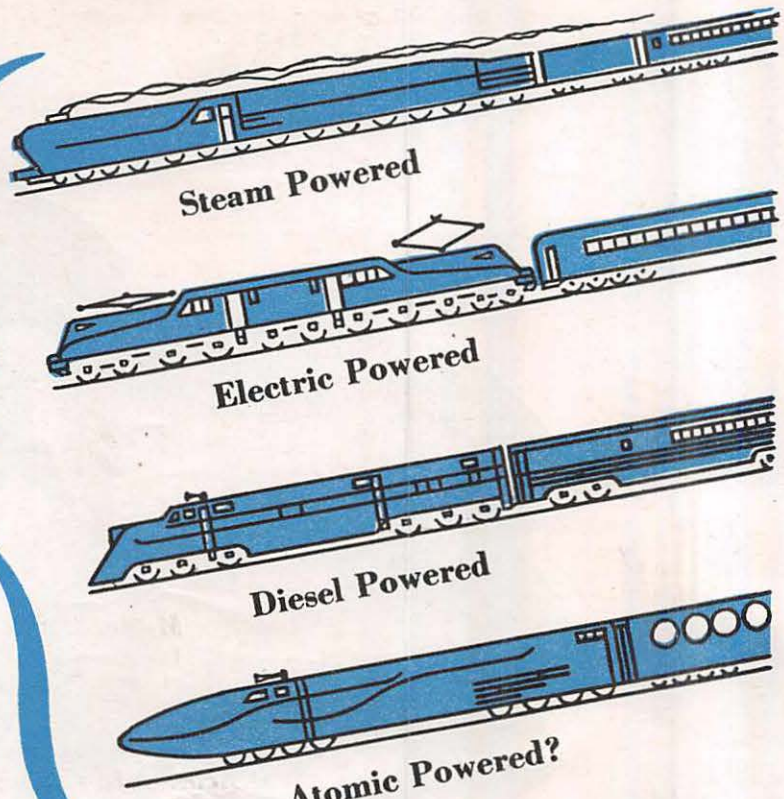
Yesterday!

Today!

Tomorrow?

AIR BRAKES—

Permit Passenger Trains to Move at Shorter Intervals and Higher Speeds, Safely



A control medium will be necessary of course, if, as some authorities claim, atomic energy can be used to run locomotives. It is interesting to note that all three present types of railroad power are controlled by air brakes. Regardless of the type of power, brake harmony and flexibility between power unit and cars are of paramount importance.

For instance, passenger cars now on order will be handled by the different types of power and most of the ordering railroads specify the modern "HSC" electro-pneumatic passenger brake. The pattern for braking is definitely "HSC". It meets present day operating requirements for speed, safety, and passenger comfort. And looks forward to higher speed and closer schedules that may develop with the anticipated expansion in passenger travel.

Specify the Complete "HSC" Schedule

Electro-pneumatic—improves schedules with flexibility and smoothness

Speed Governor Control—for control of high braking forces

"AP" Decelostat—for anti-wheel sliding protection

Westinghouse Air Brake Company

Wilmerding, Pa.

Railway Age

With which are incorporated the Railway Review, the Railway Gazette, and the Railway Age-Gazette. Name registered in U. S. Patent Office.

Vol. 121 August 10, 1946 No. 6

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In This Issue

Page

Another Modern Shop for Diesels **218**

Utilizing modern means for the maintenance of a growing fleet of locomotives, the Southern's new facilities at Alexandria, Va., were completed despite W. P. B. restrictions.

New Economic Precepts Balk Progress **223**

Samuel O. Dunn, addressing a meeting of the American Society of Mechanical Engineers, warned that substitution of governmental coercion for the economic system of voluntarism threatens technological progress and our future security.

Diesel Freight Power for Mexican Line **226**

To break a serious bottleneck traceable to heavy grades and difficulties of getting water, the National of Mexico is installing Diesel-electric locomotives on a line handling petroleum traffic.

EDITORIALS

The Crosser Law—Product of Outmoded Legislative Methods .. 215
Demand for Cars Increases 216
Maybe This Will Help 217
Lightweight Cars—Are They "Fakes"? 217

GENERAL ARTICLES

Another Modern Shop for Diesels 218
Hazards of Locomotive Shops Minimized by Common Sense 222
New Economic Precepts Balk Progress, by Samuel O. Dunn ... 223
Diesel Freight Power for Mexican Line 226
Transportation Agencies as Taxpayers 228
Organize to Promote Export Market 229

GENERAL NEWS **230**

WITH THE GOVERNMENT AGENCIES **234**

OPERATING REVENUES AND EXPENSES **252**

The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service.

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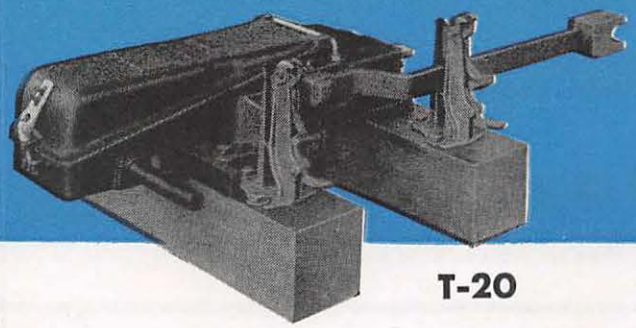
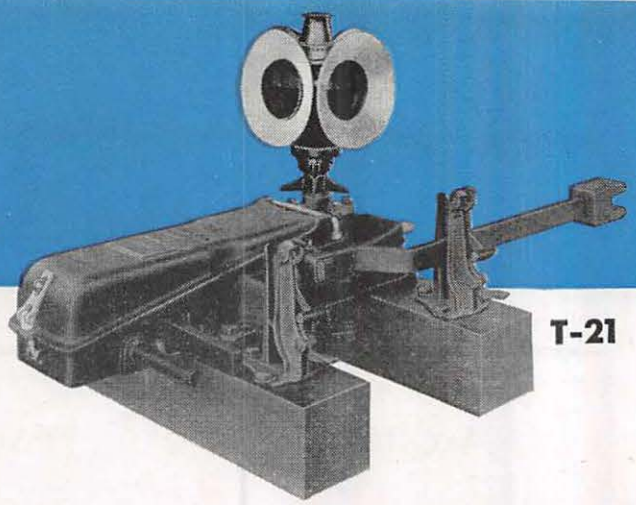


T-20



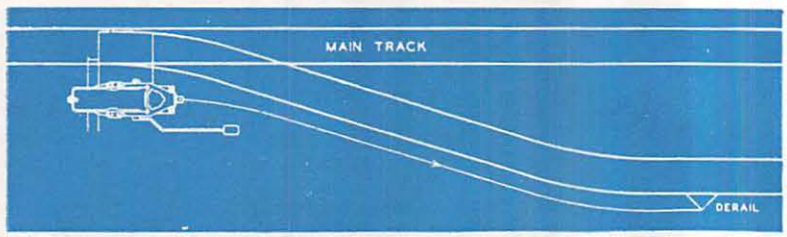
T-21

YOU CAN HAVE
THE FEATURES YOU WANT
IN "UNION" SWITCH STANDS!

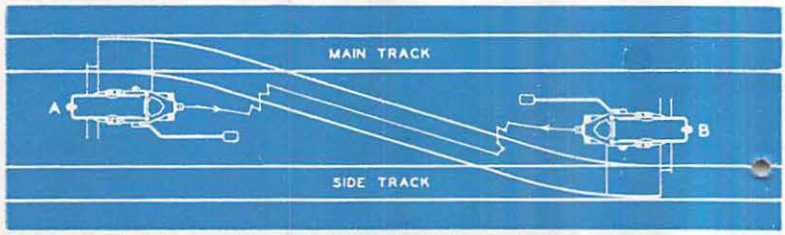
"Union" T-20 and T-21 Hand-operated Switch Stands are designed and built to serve main line, heavy-railed switches—where interlocking is not warranted, but positive protection for high speed trains is vital. They afford facing point lock protection equivalent to that of interlocked switches. They are universally applicable to every type of single and crossover switch layout. In addition, they are certain to meet your specific Point Detection and Circuit Controller requirements.

T-20 and T-21 Switch Stands are identical, except that the latter has a built-in target-drive mechanism. Bulletin 156 gives complete details. Write for it!

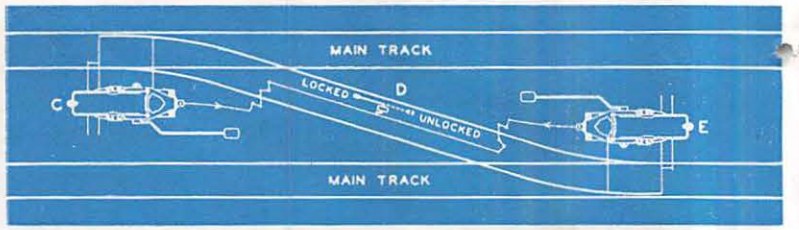
1. Rack and crank, or drive, assembly is so designed that it positively holds the switch operating rod at the end of its stroke for either normal or reverse position of the switch.
2. A standard lock rod mechanically locks the switch in its normal position—can be withdrawn only by lifting the lever out of the latch stand—is unaffected by thrust forces of passing wheels.
3. Point detector continuously checks to determine that switch points have not been damaged, and are correctly positioned.
4. Self-contained circuit controller is operated by the locking device and the point detector, and controls signal indications accordingly.



5. For Single Switch and Derail . . .
Reversal of the switch moves the derail by means of mechanical linkage attached to the projecting end of the lock bar.



6. For Crossover Between Main and Side Tracks . . .
Throwing Switch Stand at A, for crossover move, withdraws lock bar of Switch Stand B to permit its operation.



7. For Crossover Between Main Tracks . . .
Switch Stands C and E cannot be reversed until their lock bars have been withdrawn by operation of center lever D.

UNION SWITCH & SIGNAL COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

The Week at a Glance

NEW RECRUIT: Right under the very noses of Arnall and Arnold, Berge and the Budget Bureau, the wicked railroads have been prostituting the Army and robbing the federal treasury of millions—or is it billions?—with their scandalous freight charges on war material. At least that is what Senator Taylor of Idaho tells Senator Mead of New York, in letters sprinkled with colorful but uncomplimentary references to the railroads' virtue. If the Mead committee has time, says the senator, it ought to look into this business. The news pages summarize these charges, and the A. A. R.'s replies to them. Obviously the ranks of the political rate makers have gained a zealous adherent. What is less obvious is what the railroads have done with all their alleged ill-gotten gains. Their stockholders particularly would like to know. Could they have been paid out in taxes?

●

SOUTHERN DIESEL SHOP: An illustrated article on page 218 describes the new shop built at Alexandria, Va., by the Southern for the running maintenance of a fleet of Diesel-electric locomotives. Design features include individual meters for clean oil outlets, subways under the tracks midway of the pits, stairways between high and low floor levels at the middle of long platforms, a concrete washing platform outside the shop building, and liberal use of glass blocks for daylighting the interior.

●

EXPORT PROMOTION: Regardless of the demand for railroad cars for domestic use, car builders will have surplus capacity once the present shortage of materials is alleviated. So will the steam locomotive builders. Many countries overseas are in dire need of such equipment. If a substantial foreign market can be developed for American railroad equipment builders it will be to their advantage, obviously, and it will be to the advantage of domestic railroads, too, because the builders' overhead will be spread over a greater volume of business (thus reducing the price of equipment bought by American roads) and because they will provide the railroads more traffic. As a feature article this week points out, the difficulty is to discover how many cars and engines each country can economically use, how their purchase can be financed, and what part, if any, the American government should take, as a matter of international politics, in such financing. A committee of bankers and industrial executives has been named by President Truman to work on these problems.

●

STALLED ON SATURDAY: Railroads are continuing to order freight cars, even if the orders are too late—especially with steel and lumber as scarce as they are now—to have any effect on this year's acute car shortages. Government plans to finance their purchase of 50,000 cars are being explored, says A. A. R. President Pelley, but the immediate difficulty can be surmounted only through the cooperation of railroads and shippers in getting every possible ton-mile out of every available car. One way that can be done, admittedly an expensive way, is to accept and unload cars on week-ends. This is, in effect, a five-day-week car shortage, and it can be alleviated by removing that cause.

●

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are even extended to former employees who have not done any railroading for 20 or 30 years. The tax payments provided to cover these wide benefits are insufficient to meet the cost, a condition which will result ultimately either (1) in bankrupting the pension and unemployment funds, (2) in shifting a burden of hundreds of millions of dollars onto the federal treasury, or (3) in overtaxing future generations to pay for the profligacy of the present one.

Certainly employers generally could easily have been aroused by the threat *to them* of this law, which has now established a precedent by which, if parallel benefits are extended to employees of other industry—as will now almost certainly become a union goal—the nation's annual bill for social security will be raised to $20 billion. Even railroad employees, if they knew all the facts, would not have supported this bill—because they are now paying heavy payroll taxes with the expectation of getting substantial pensions, which they may not get if the pension fund goes bankrupt; while the increased costs of this legislation will injure the railroads in bidding for competitive traffic, thus reducing the number of employees the railroads can hire. The shipping community would have vigorously opposed this measure if it had had all the facts about it, because there is no justice whatever in asking shippers, as will now be necessary, to pay rates to cover costs of "social security" on the railroads at a far more generous rate than is provided for any other class of Americans.

Civic associations and all other organizations interested in decent government would have quickly aroused themselves in opposition to this proposal, if they had known about it, because of the corruption of orderly processes of legislation involved in its passage. The bill was originally introduced by Congressman Crosser substantially as written by the unions. The House committee on interstate and foreign commerce, after prolonged hearings and the mature study necessary for such a complex measure, reported to the House, replacing the original bill, a greatly modified substitute. On the floor of the House, the bill representing the deliberation of this expert committee was thrown out and the original Crosser proposal was restored, in the exact form prescribed by the unions.

Public Relations Skills Not Used

What Congress has done is to enact a bill on a highly complex subject, rejecting completely the advice of its own expert committee, and accepting instead the virtual dictation of legislation by the unions which are the beneficiaries. Such abject submission to union dictation would have been impossible in a Congress, both houses of which approved the Case bill by substantial majorities, except for the difference that the eyes of the public were on it when the Case bill came to a vote, while nobody took the trouble to draw popular attention to what was going on when the Crosser bill was in process of enactment.

Those with knowledge of public relations work both inside and outside the railroads know that the railroad industry has as competent public relations men as are to be found in the profession. But those men were not called in on this Crosser bill—or at any rate, not until the battle already had been lost. The skill and intelligence available to the railroads for dealing with such situations as this cannot go to work on jobs in which they are not authorized to engage. Opinion surveys have demonstrated that neither employees nor the general public have any more than a slight inkling of the vital economic facts of the railroad business—either of the scantiness of railway earnings, the poor state of the railroads' capital supply, or the injustice and danger of their competitive handicaps. In the jungle of such public and employee ignorance, bands of anti-railroad pressure groups are breeding and multiplying. As a protective measure against these hordes, the railroads have, so far, contented themselves, for the most part, with the occasional efforts of snipers—i.e., personal-approach legislative contacts. Repeated experience does not indicate that this method is ever going to accomplish anything but a delaying action to final disaster.

A vigorous and comprehensive program of employee and public education is the only sure cure for the steady deterioriation of the railroads' position under pressure-group attacks—alike from their competitors and the unions. Such a program on a scale large enough to prove effective would be very expensive—that is, it might cost a small fraction of the outlay occasioned in a single year by just one anti-railroad law such as this Crosser measure.

Demand for Cars Increases

During June, box car loadings in the country as a whole averaged 381,725 weekly. This is a 13,000 increase over the average of the first half of August, 1945, when the necessity for transporting war materials in great volume was paramount. The normal fall peak loading season is just ahead and shippers and receivers must do everything possible to augment the box car supply by prompt loading and unloading.

The principal demand for box cars at the moment is for loading grain and grain products. According to the latest estimate of the Department of Agriculture the total wheat production this year is estimated at 1,009,092,000 bu. The present crop is the third consecutive one of a billion bushels and this year's yield is second only to that of 1945. In addition, the corn crop this year is estimated to be 3,341,646,000 bu., an all-time record and 10.7 per cent more than the 1945 crop. The railroads are faced not only with a heavy demand for box cars for grain loading but also for other commodities such as food containers, fertilizers, building materials, fresh lumber and textiles.

Box car demand will continue at its present peak or better through the normal autumn heavy loading season. There is only one means of dealing with it, that is to handle box cars so as to produce the greatest volume of transportation from the supply now available. In order to do this, the railroads will have to be on their toes for the next several months. This, in itself, will not be sufficient. It will also be necessary for the shippers to aid in every possible way. Every meeting of a Shippers' Advisory Board that is held between now and the time when the fall peak period is past should be told by members of railroad contact committees just what the situation is and what is necessary on the part of the shippers to aid in producing, by prompt release

The Week at a Glance

NEW RECRUIT: Right under the very noses of Arnall and Arnold, Berge and the Budget Bureau, the wicked railroads have been prostituting the Army and robbing the federal treasury of millions—or is it billions?—with their scandalous freight charges on war material. At least that is what Senator Taylor of Idaho tells Senator Mead of New York, in letters sprinkled with colorful but uncomplimentary references to the railroads' virtue. If the Mead committee has time, says the senator, it ought to look into this business. The news pages summarize these charges, and the A. A. R.'s replies to them. Obviously the ranks of the political rate makers have gained a zealous adherent. What is less obvious is what the railroads have done with all their alleged ill-gotten gains. Their stockholders particularly would like to know. Could they have been paid out in taxes?

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SOUTHERN DIESEL SHOP: An illustrated article on page 218 describes the new shop built at Alexandria, Va., by the Southern for the running maintenance of a fleet of Diesel-electric locomotives. Design features include individual meters for clean oil outlets, subways under the tracks midway of the pits, stairways between high and low floor levels at the middle of long platforms, a concrete washing platform outside the shop building, and liberal use of glass blocks for daylighting the interior.

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EXPORT PROMOTION: Regardless of the demand for railroad cars for domestic use, car builders will have surplus capacity once the present shortage of materials is alleviated. So will the steam locomotive builders. Many countries overseas are in dire need of such equipment. If a substantial foreign market can be developed for American railroad equipment builders it will be to their advantage, obviously, and it will be to the advantage of domestic railroads, too, because the builders' overhead will be spread over a greater volume of business (thus reducing the price of equipment bought by American roads) and because they will provide the railroads more traffic. As a feature article this week points out, the difficulty is to discover how many cars and engines each country can economically use, how their purchase can be financed, and what part, if any, the American government should take, as a matter of international politics, in such financing. A committee of bankers and industrial executives has been named by President Truman to work on these problems.

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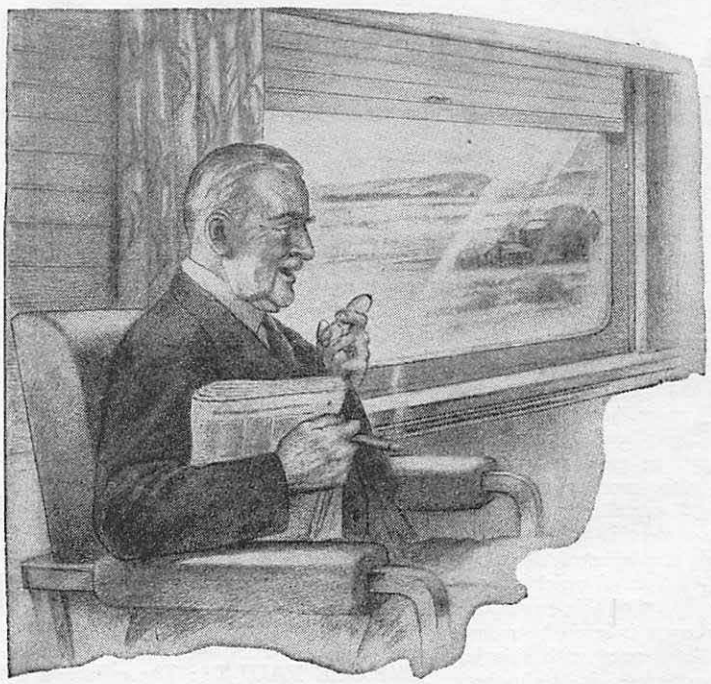


Railroads Are Self-Supporting

says

R. R. Rider

(Number ten of a series)

Did you notice the section gang we just passed? Even if you didn't you'd soon know it if those fellows weren't there; they're giving us the smooth ride we're enjoying. Watch a section crew at work sometime. A comparison between the miles of track in service and the feet a crew progresses in a day would stagger you. But I don't suppose a foreman thinks of that. He's only concerned with the stretch he's responsible for.

When I was a kid I watched many a section crew while I loafed beside the track. Used to envy the muscles of husky Italians and Irishmen who swung the tamping picks in those days. Later I was too busy to pay much attention to such things, but after a fifty year lapse I noticed a crew working near an outlying station where I waited for a train one day. It was amazing to see how that work's been mechanized! Now they've got tie tampers, ballast cleaners, and I don't know what all. Railroads seem to be spending plenty of money getting their track back in shape after the pounding it took during the war, but they're doing the spending, not we, and that gives you and me a break, because railroads not only keep up their own right of way but pay taxes on it. It's just the opposite with their competitors. We're the fellows who provide them with highways, waterways, and airports. Oh, I know the government collects something in the form of licenses, taxes, and tolls, but it's hardly a drop in the bucket.

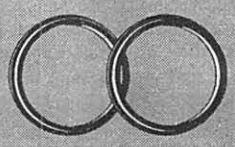
Railroads have been protesting this unfairness for a long time, and up to now they haven't got very far. But I do believe that more people are becoming aware of how important it is for railroads to stay healthy, and they're anxious for the roads to have a better competitive break.

Edgewater

Serving America's Railroads

RING SPRING DRAFT GEARS

ROLLED STEEL WHEELS



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RAILWAY AGE

The Crosser Law—Product of Outmoded Legislative Methods

How many Americans realize that Congress enacted in the week before its adjournment, and President Truman approved, an extension of "social security" benefits for railway employees, which makes of such employees a highly privileged class, enjoying favors far greater than those extended even to war veterans? Readers of this paper know the answer to this question, which is that practically none of the electorate is informed about this legislation (the so-called Crosser bill, H. R. 1362) because, if knowledge about it had been general, Congress would not have dared enact it.

The railroads—the primary but by no means the only victims of this new law—chose to keep silent about it while the debate in Congress went on, for reasons which seemed sound to them at the time, but which events have proved to have been disastrously wrong.

Clamor Overwhelms Convictions

Political tactics of the "individual approach" type—i. e., educational effort directed solely at informing by personal contact the legislators themselves of the merits or demerits of proposed legislation, without extending the educational effort to the electorate—are often effective where the issue is non-controversial or where neither proponents nor opponents have many votes at their command. In such a case the individual legislators are at liberty to exercise independent judgment. The side having the best argument in the national interest can safely rely on the presentation of its evidence to the legislators, as would be done in a court of law. But where, as with this Crosser bill, the protagonists are at work out in the sticks drumming up all the high-pressure mail and telegrams they can, then it seems just plain foolhardy to trust everything to the courage and intellectual integrity of Congress, counting upon it to vote its own convictions rather than those of a noisy minority of constituents.

When a pressure group which commands a large number of votes really goes to work, considerations of justice and wisdom and the national interest take flight. The only way that the balance can be restored is to counteract that group's influence by arousing more votes than it can. This means a campaign of popular education, which costs money, but much less than the many millions a year that the Crosser bill will cost the railroads. Experience has shown that pressure groups, no matter how powerful or how skillfully managed, can be routed if sufficient effort is put forth to awaken the intelligence and patriotism of the electorate as a whole. The outstanding example of this is the ending of prohibition. On a lesser scale, and more nearly comparable to the issue presented by the Crosser bill, was the successful recent effort to clip the wings of O.P.A. —and the majority vote on the Case bill in both houses of Congress. In both these instances, Congress, if left alone to the pressure groups, would doubtless have been unable to have mustered more than a handful of members to vote as they actually did vote. Efforts at popular education by the National Association of Manufacturers and other business groups on these two measures demonstrated that no self-seeking body of special interests is strong enough to control Congress if its opponents have the courage and the energy necessary to inform the public of the facts.

Inasmuch as it has long been the policy of the railroads to rely mainly in their legislative work on appeals to the intelligence and public spirit of individual legislators, the railroad officers charged with carrying out this policy are not the ones to blame for the costly failure of the policy to produce results. The fault lies, rather, in the policy itself—which has been continued in the face of the fact that vote-controlling pressure groups have been rapidly improving their techniques and hence their influence. The individual-approach legislative method was extremely effective before these pressure groups were organized or had carried their art to its present perfection. But the cross-bow, a terrifying weapon in its day, is no match for a bazooka.

The Public Would Have Been Interested

The Crosser bill would have been a perfect "natural" for a campaign of popular education, because it is atrocious from every conceivable angle of economics and political decency. It establishes gross favoritism in that it extends unemployment insurance benefits, at the employer's expense, to cover hazards for which the employer is not responsible, e.g., illness and maternity—a coverage the law does not give to employees of any other industry, and not even to veterans who saw active military service. The rate of payment for unemployment is $25 a week, as compared to $20 or less for employees of other industry in most states.

The railroad pension plan, already far more generous than general "social security," is amended by the Crosser bill to provide benefits for widows and other survivors which are about 25 per cent greater than those authorized under the general social security law for employees of other industry. Disability payments

are even extended to former employees who have not done any railroading for 20 or 30 years. The tax payments provided to cover these wide benefits are insufficient to meet the cost, a condition which will result ultimately either (1) in bankrupting the pension and unemployment funds, (2) in shifting a burden of hundreds of millions of dollars onto the federal treasury, or (3) in overtaxing future generations to pay for the profligacy of the present one.

Certainly employers generally could easily have been aroused by the threat *to them* of this law, which has now established a precedent by which, if parallel benefits are extended to employees of other industry—as will now almost certainly become a union goal—the nation's annual bill for social security will be raised to $20 billion. Even railroad employees, if they knew all the facts, would not have supported this bill—because they are now paying heavy payroll taxes with the expectation of getting substantial pensions, which they may not get if the pension fund goes bankrupt; while the increased costs of this legislation will injure the railroads in bidding for competitive traffic, thus reducing the number of employees the railroads can hire. The shipping community would have vigorously opposed this measure if it had had all the facts about it, because there is no justice whatever in asking shippers, as will now be necessary, to pay rates to cover costs of "social security" on the railroads at a far more generous rate than is provided for any other class of Americans.

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Public Relations Skills Not Used

What Congress has done is to enact a bill on a highly complex subject, rejecting completely the advice of its own expert committee, and accepting instead the virtual dictation of legislation by the unions which are the beneficiaries. Such abject submission to union dictation would have been impossible in a Congress, both houses of which approved the Case bill by substantial majorities, except for the difference that the eyes of the public were on it when the Case bill came to a vote, while nobody took the trouble to draw popular attention to what was going on when the Crosser bill was in process of enactment.

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A vigorous and comprehensive program of employee and public education is the only sure cure for the steady deterioriation of the railroads' position under pressure-group attacks—alike from their competitors and the unions. Such a program on a scale large enough to prove effective would be very expensive—that is, it might cost a small fraction of the outlay occasioned in a single year by just one anti-railroad law such as this Crosser measure.

Demand for Cars Increases

During June, box car loadings in the country as a whole averaged 381,725 weekly. This is a 13,000 increase over the average of the first half of August, 1945, when the necessity for transporting war materials in great volume was paramount. The normal fall peak loading season is just ahead and shippers and receivers must do everything possible to augment the box car supply by prompt loading and unloading.

The principal demand for box cars at the moment is for loading grain and grain products. According to the latest estimate of the Department of Agriculture the total wheat production this year is estimated at 1,009,092,000 bu. The present crop is the third consecutive one of a billion bushels and this year's yield is second only to that of 1945. In addition, the corn crop this year is estimated to be 3,341,646,000 bu., an all-time record and 10.7 per cent more than the 1945 crop. The railroads are faced not only with a heavy demand for box cars for grain loading but also for other commodities such as food containers, fertilizers, building materials, fresh lumber and textiles.

Box car demand will continue at its present peak or better through the normal autumn heavy loading season. There is only one means of dealing with it, that is to handle box cars so as to produce the greatest volume of transportation from the supply now available. In order to do this, the railroads will have to be on their toes for the next several months. This, in itself, will not be sufficient. It will also be necessary for the shippers to aid in every possible way. Every meeting of a Shippers' Advisory Board that is held between now and the time when the fall peak period is past should be told by members of railroad contact committees just what the situation is and what is necessary on the part of the shippers to aid in producing, by prompt release

of cars, the necessary box car-days to meet the emergency. There will not be enough box cars to go around under the normal handling of such equipment. The expedients adopted in war-time will have to be revived —and surpassed—if the situation is not to result in car shortages much worse than those experienced during the war.

Maybe This Will Help

While a number of top ranking maintenance officers are racking their brains over the problem of how to attract college trained men into maintenance of way work they might profitably give consideration to making the working conditions more desirable—a phase of the situation that so far seems to have received little attention. Such men might be inclined to regard railroad work with greater interest if they could be assured that, when the rank of track supervisor or its equivalent is attained, they would be permitted to lead relatively normal lives, free of some of the extremely exacting demands now made on the time of many such officers—demands far in excess of those made on individuals of comparable standing in other industry.

From the early days of railroading the maintenance supervisor has had a hard road to hoe, not only in long hours during the day, frequently seven days a week, but in being required to hold himself available for call at all other times, including Sundays and holidays. While the regular working period for most employees, both on the railroads and in other industries, has been progressively shortened, the maintenance supervisor has found that the demands on his time and person have shown little amelioration.

His hours are still long and arduous, frequently lasting from dawn until long after dark. Finally, at home, the chances often are more than even that he will be called out for one reason or another. (The record of one track supervisor shows that during a recent 30-day period he was required to leave his bed at least once during each of 21 nights.) He still cannot go out for the evening without notifying the dispatcher where and how he can be reached. He still frequently must attend staff meetings on Sunday mornings, and he still seldom knows whether he will be able to take his vacation when planned or, for that matter, whether he will get one at all.

There is good cause to believe that this situation has been a primary reason for the refusal of many foremen to accept supervisory positions and may have been a factor in the recent flurry of resignations among supervisors in the track departments of a number of roads.

There are no insurmountable obstacles to some reduction in the excessive demands made on the time of maintenance supervisors. The opinion is held by many of them that they are frequently called out at night to handle matters that actually do not require immediate attention. The elimination of such instances, where they exist, would help materially. There are other respects, too, in which the working conditions of these officers could be improved, provided their superiors once become convinced that the planning and effort required will be justified by the results.

Lightweight Cars—Are They "Fakes"?

In his column Westbrook Pegler recently expressed the opinion that "the streamliner and the lightweight car are fakes as far as the comfort and safety of the passengers are concerned." Later in his discussion he goes on to say that "the lightweight car is less stable at high speed and on curves for the same reason that a little automobile can't hold the road under conditions that a big heavy machine meets without the slightest difficulty."

He further raises a question as to the relative safety of the lightweight and conventional heavy passenger cars in the matter of speed around curves.

Mr. Pegler cited his own personal experience in support of his contentions with respect to the inferior riding qualities of the lightweight cars. There is no reason to doubt the reality of that experience. Unless he can cite experience with the conventional heavier rolling stock under the same conditions of speed over the same line, however, his experience is not convincing evidence of the relative ridability of the two types of equipment.

Differences of weight in themselves are not inherent causes of differences in riding qualities. The need for improvement in riding qualities of cars intended for the high operating speeds which have become current in streamline train practice, irrespective of the weight of the cars, has led to great improvement in passenger-car body suspensions. This has particularly affected the riding qualities of lightweight cars because these are the ones which perform the major part of the passenger-train service operating at the higher speeds. So far as the engineering possibilities are concerned, there is no inherent reason why reduced weight should be synonymous with poor riding quality at any given speed.

In the matter of relative safety weight reduction in itself is not necessarily a factor. Every pound added to the car structure carries the seeds of its own destruction when moving at high speed; the kinetic energy of the moving body varies as its mass. Indeed, to the extent that cars built of stronger or lighter weight materials are designed to provide strength equal to that of the conventional heavy cars the element of safety, so far as the car structure is concerned, favors the lightweight construction.

Weight reduction is largely effected in the car-body structure and relatively less in the trucks and various items of equipment suspended on the car underframe. This tends to lower the center of gravity of the lightweight cars below that of the conventional heavy cars. This, in turn, reduces the tendency of the lightweight cars to overturn on curves as compared with the conventional heavy cars under comparable conditions of speed and curvature.

While Mr. Pegler's opinions with respect to car construction need modification, he is on sound ground in the implication of his statement that "the passenger is little interested in the type of construction of the cars so long as they are safe and provide a degree of comfort which he finds satisfactory." Car builders and railroads alike are becoming increasingly aware of this fact.

Another Modern Shop for Diesels

Facilities constructed by the Southern at Alexandria, Va., for running maintenance of this type of power follow modern practice in design and equipment

THE Southern recently completed a new Diesel shop at Alexandria, Va., for the running maintenance of its growing fleet of Diesel-electric freight and switching locomotives; although the design of the shop was limited somewhat by War Production Board restrictions, it is of fire-resistant construction throughout and possesses all the facilities required for the scope of work planned at this point on this type of power. Among the facilities are full-length, well-lighted and well-drained inspection pits; a depressed floor; continuous elevated platforms; and modern means for washing and refueling locomotives, and for replenishing or changing lubricating oil.

Some features of unusual interest include individual meters for each clean oil outlet, so the amount of oil delivered to each Diesel unit can be accurately recorded; a subway under the track at the middle of each long pit to permit ready movement from one side of the track to the other, or from the depressed floor level into the pits, without going to the ends of the pits; stairways between the platform and depressed floor levels at the middle of the long platforms; liberal use of glass blocks for window openings; and a concrete washing platform, together with other servicing facilities outside the shop.

The Southern now has three 2,000-hp. and thirteen 4,000-hp. passenger Diesel locomotives, seventeen 5,400-hp. freight Diesels, and 66 Diesel switchers ranging from 380 to 1,000 hp. In addition, it has on order twenty-five 6,000-hp. freight Diesels and fourteen 1,000-hp. Diesel switchers. Indicative of plans of the road for expanding the use of Diesel power is its inauguration recently of several Diesel-operated, fast-freight schedules.

Traffic Congestion Relieved

Since the latter part of 1943 the Southern has used four 5,400-hp. freight Diesels on its Washington division, between Potomac yard (Washington, D. C.) and Monroe yard (Lynchburg, Va.), which division has the ruling grades on the double-track main line of the road between Washington and Atlanta, Ga. Through their use, former traffic congestion on this division, caused by the necessity for reduced tonnage, has been greatly alleviated.

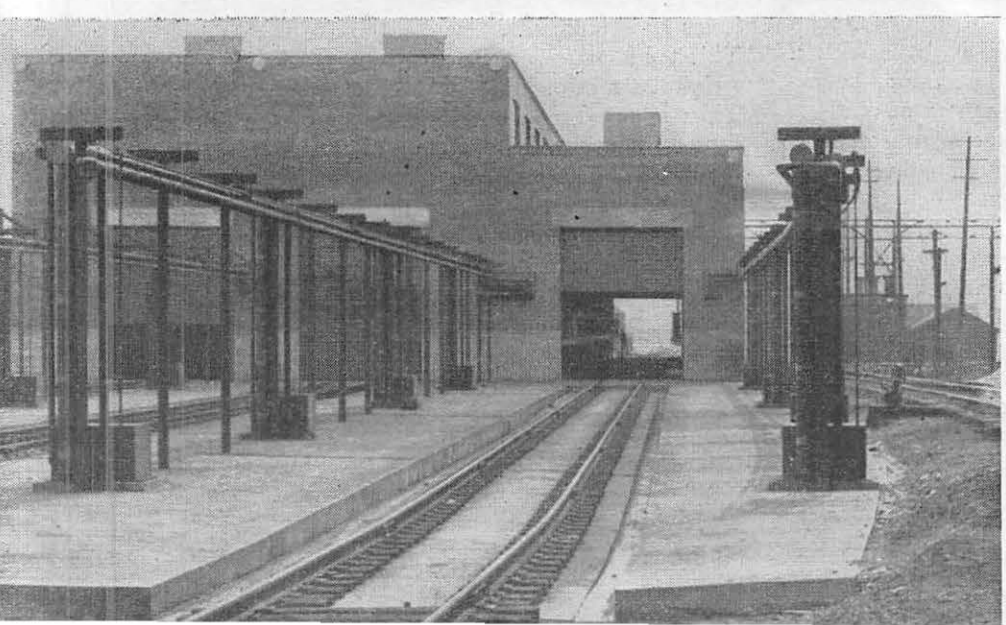
The four freight Diesels on the Washington division, as well as two Diesel switchers used in and around Alexandria and Potomac yard, were formerly serviced and maintained with temporary outdoor facilities. Soon after the freight Diesels were placed in service on the division, however, it was decided to build a modern shop at Alexandria, ample for future needs, for the running maintenance of all freight Diesels operated out of Potomac yard and the Diesel switchers used at this terminal. The repair and running maintenance of passenger Diesels will continue to be handled at Atlanta, as in the past, where a new Diesel shop for that purpose will also be built.

Plans for the shop at Alexandria were completed and submitted to the War Production Board in the summer of 1944. After several revisions to reduce the amount of steel and wood involved, the plans were approved and contracts were let. Bad winter weather, a shortage of labor, and difficulty in securing some materials delayed the work, with the result that construction was not completed until late in the summer of 1945, and all equipment was not installed until several months later.

The new shop is located parallel with and between a group of yard tracks and the road's locomotive machine shop at Alexandria. The building, essentially of brick construction, is 222 ft. long and 83 ft. wide, with a 46-ft. projection at the east end, 48 ft. wide, for a parts repair shop and a cleaning room. Three tracks enter the shop at the west end, which are numbered 1, 2 and 3 from south to north. Track 1 is continuous through the building, while Tracks 2 and 3 are stub tracks, extending into the building 212 ft. and 155 ft., respectively. Tracks 1 and 2 have pits 203 ft. long for servicing entire 5,400-hp. Diesel locomotives, and are long enough so that the locomotives do not block end stairs to the pits. Track 3 has a pit 78 ft. long, and is used for repairs to single Diesel units or for servicing Diesel switchers, the inner end being used as a wheel track. The washing platform and fueling and sanding facilities are located on Tracks 1 and 2, just outside the shop at its west end.

The shop has a drop pit serving all three tracks, located near the west end, and a 7½-ton overhead traveling crane, serving Tracks 2 and 3, which will handle all parts and equipment except a complete Diesel engine. Traction motors, as well as wheels and axles, are removed and replaced at the shop, but major repairs to individual engine units, including the overhauling of these units and all other work coming under the classification of heavy repairs, are made at Spencer, N. C., in an existing locomotive heavy repair shop. In other words, the new Diesel shop at Alexandria is used to service the locomotives with fuel oil, lubricating oil, distilled water and sand, to clean the air and oil filters, and

West end of the shop, showing a portion of the washing platform. Note the overhead service lines and valve boxes at platform level



to replace worn parts, primarily on a mileage basis, before a failure occurs.

The building is a one-story structure, with the service rooms and a storeroom located at the east end on the same level as the elevated platforms. Another storeroom and an oil storage room are located in separate basements at the east end of the shop. The building has spread-footing, reinforced concrete foundations, concrete floors, brick and glass-block walls, steel roof trusses supported on brick piers and wall pilasters, and a roof deck of precast cement tile covered with tar and gravel roofing.

The main portion of the building has two bays extending its full length—a low bay over Track 1, and a high bay over Tracks 2 and 3 to accommodate the 7½-ton overhead traveling crane. Ample daylight illumination is provided by the large window areas of glass block in the side walls, each of which contains hinged sections of wood sash for ventilation. The track doors in both ends of the shop are of the overhead, wood, vertical-lift type, manually operated.

Within the shop, looking east, from above Track 3. Box car at left is spotted on wheel platform. Upstairs storeroom is behind the box car, and open doorway to the repair room may be seen at the end of the elevated platform

Three Working Levels

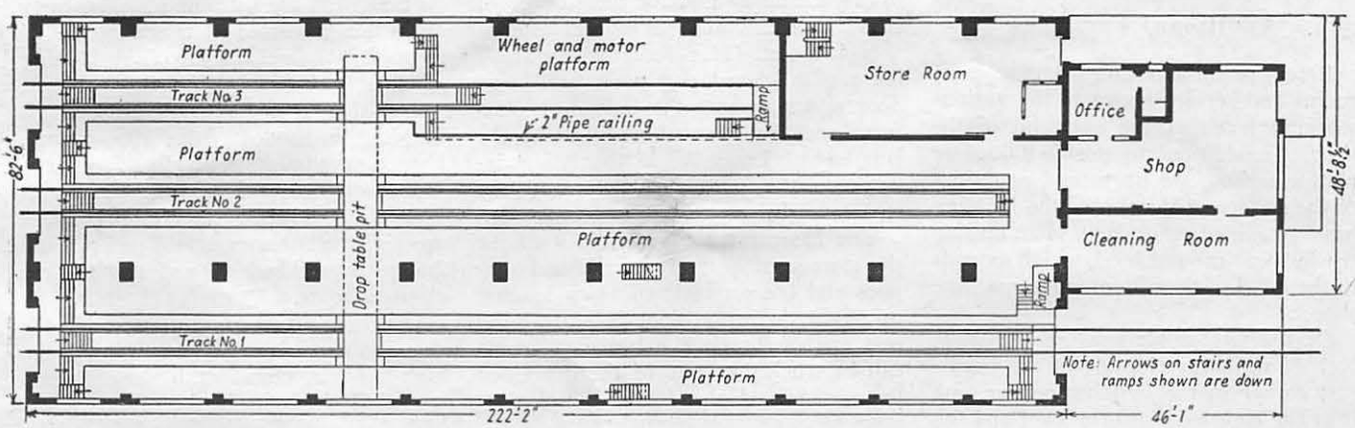
This shop has three working levels; a depressed floor, with elevated working platforms along all three tracks, and a wheel and traction motor storage platform, level with the top of the rails, at the east end of Track 3. The track pits are 4 ft. 6 in. deep (from top of rail), 3 ft. 6 in. wide at the bottom and 3 ft. 10 in. wide at the top, with ledges 2 in. wide half way up on each side upon which planks can be placed for men to stand on when working on trucks or underframes. The pit rails are supported on standard tie plates and are spiked with cut spikes to 8-in. by 8-in. creosoted tie blocks, 1 ft. 6 in. long, which are set in the pit wall concrete. The general floor level, except in the service rooms, the wheel and motor platform, and directly at the track doorways, is depressed 2½ ft. below the top of rail.

The floors of the pits are slightly crowned to slope gently toward drainage gutters along each side, the gutters being pitched to drain into sumps at the ends of each pit. There is also a sump for the drop table pit. Drainage of the depressed floor areas is provided by sections of secondhand boiler flues set at frequent intervals in the concrete of the pit walls, through which water can drain into the pit gutters.

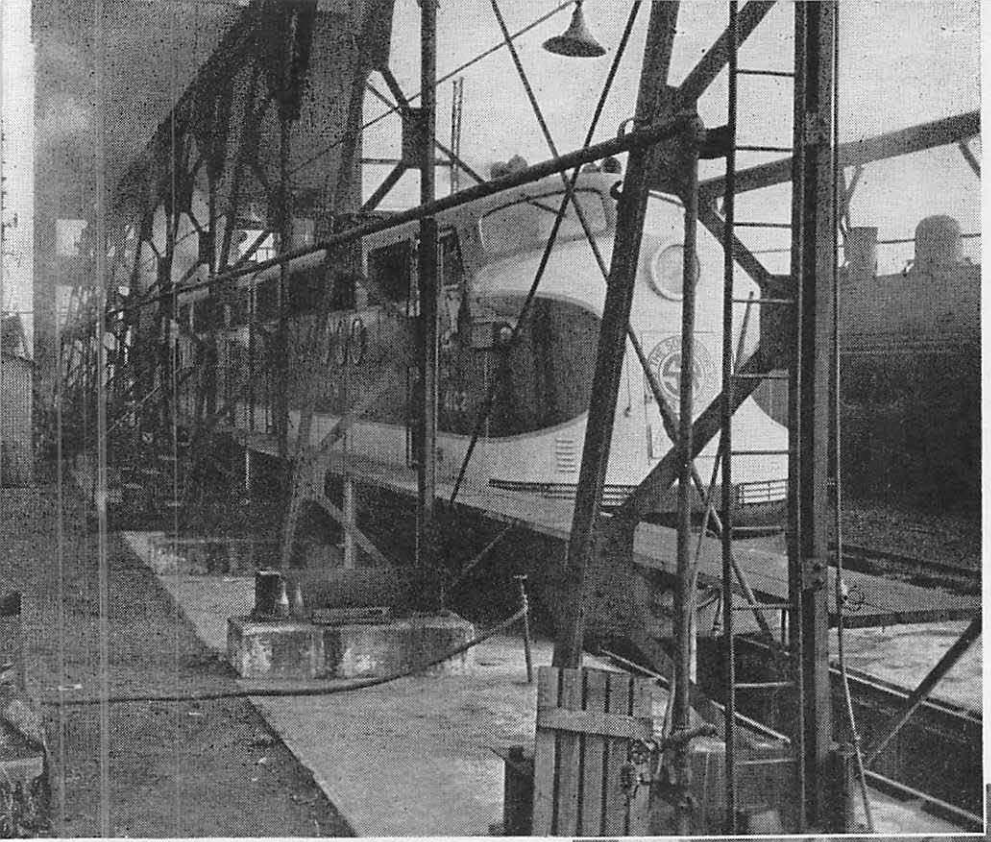
All of the area within the shop alongside and between tracks, except at the wheel platform and ends of the building, is occupied by elevated platforms. These platforms are supported on rows of used superheater flues set in concrete, with pairs of five-inch channels welded to the tops of the boiler flues. The decks are of plank construction on 3-in. by 6-in. joists, and are 7 ft. 1 in. above the level of the depressed floor, or 4 ft. 7 in. above the top of the rail, affording upper working areas at locomotive floor level.

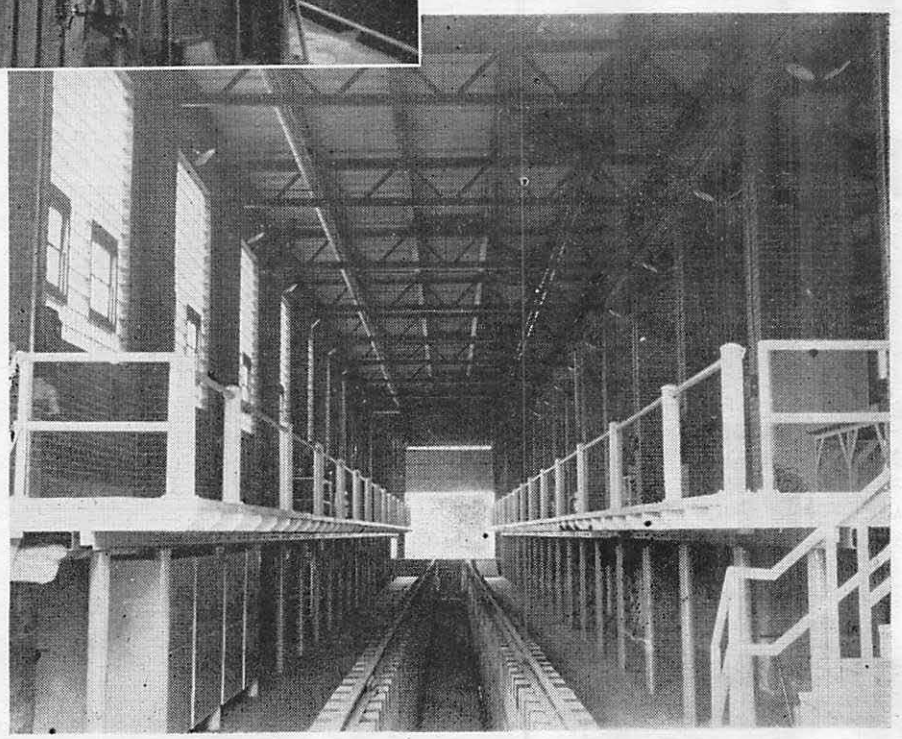
There are four such platforms, three of which are approximately 198 ft. long. The other platform is 70 ft. long and extends along the north wall of the building, from a stairway at the west end to the wheel platform at its east end. Steel work benches are located at intervals on each platform, enabling the shopmen to have tools and to do bench work near the cab openings of the Diesels being serviced. In addition to stairways at the ends, the platforms on opposite sides of Track 1 each have a stairway down to the depressed floor level, located at about their mid-points. The platform between Tracks 2 and 3 also has a stairway down to the east end of the wheel platform.

An interesting feature of the elevated platforms is the pipe railings alongside the tracks. These are constructed with posts of used superheater flues, each welded to a metal base and notched at the top to fit horizontal sections of 2¼-in. boiler flues. The tops of the posts have hinged caps so that sections of the handrail flues opposite the doorways of the locomotive being serviced can be lifted out. The pipe railings at the ends



Floor plan of shop, showing pits and elevated platforms





Above—A Diesel being serviced at the temporary outdoor facilities formerly used. Right—Interior view at Track 1

of pits and at other points are of all-welded construction.

All three tracks have convenient outlets or connections for clean lubricating oil, normal water, steam, and compressed air, and for the collection of dirty lubricating oil. The lines serving these outlets are suspended beneath the decks of the platforms and, as mentioned previously, a separate meter, above the platform level, is provided at the base of each clean lubricating oil outlet. The steam and clean lubricating oil lines are insulated and the oil is heated by steam coils beneath the storage tank.

Access to the pits is by means of stairs at each end, and, in addition, the long pits serving Tracks 1 and 2 can be entered by stairs at their mid-points from the depressed floor level on each side. These latter stairs also serve as an underpass for each track.

Additional Facilities

Ramps permit trucking from the storerooms and service rooms to the various working levels at the east end of the shop. In addition, an outside unloading platform along the north and east sides of the service projection of the building has an inclined ramp down to an outside truckway at ground level, which extends to the nearby steam locomotive machine shop.

Of the two storerooms at the shop, both of which are located at the northeast corner of the building proper, one is at the elevated platform level and the other is in the basement, immediately below. The upstairs storeroom is 61 ft. by 24 ft. and is used for the storage of small materials and parts, and also as a tool room. This room has a small office with glazed partitions, and large door openings onto the unloading platform and the elevated platform at the east end of Track 2. It also has stairways to the wheel platform and the storeroom below.

The basement storeroom is used for the storage of heavy materials and supplies and has an inclined ramp leading up to the depressed floor level near the east end of Track 2, whence materials can be trucked to any of the depressed floor areas and also to the wheel platform.

The one-story projection at the east end of the shop, where the floor level is the same as that of the elevated platforms, houses a cleaning room 16 ft. by 46 ft., and a repair shop 32 ft. by 46 ft. In one corner of the latter room is a foreman's office with shower bath and toilet facilities.

The cleaning room, which is protected by fire doors, has a rinse booth, engine-parts cleaning tanks, filter washing tanks and an oven dryer. The shop in which engine parts are repaired and assembled has a lathe, drill press, battery-charging equipment, and steel work tables. A steam condenser and wooden tank for distilled water are also located in this room. A fire door protects an opening between the cleaning and repair rooms.

The oil room, located in a basement under the cleaning room, houses a 15,000-gal. clean lubricating oil tank, a 1,500-gal. dirty oil tank, a small flushing oil tank, and the oil pumps. The dirty oil is not processed at this shop but is shipped in barrels to an oil reclaiming plant.

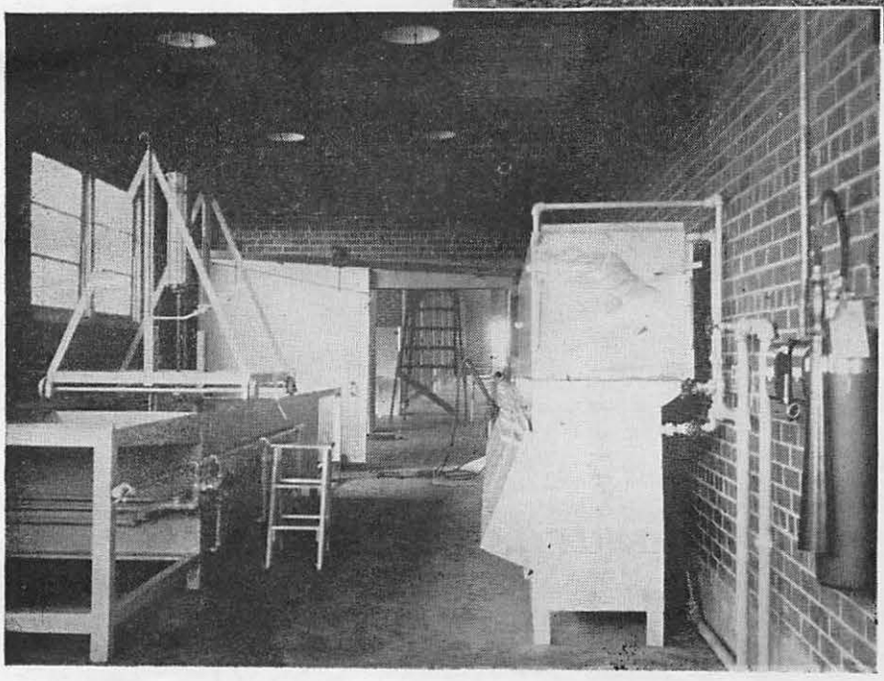
The shop is heated by overhead unit heaters, suspended from the ceiling. Forced ventilation is furnished by large roof ducts with 45-in. square asbestos ventilators and motor-driven fans. There are eight ventilators over Tracks 1 and 2, two over Track 3, and one for the cleaning room.

Overhead artificial lighting within the shop is by means of 500-watt Holophane high-bay reflectors, with dust covers, spaced 20 ft. apart in the center of the high bay over Tracks 2 and 3, and by 300-watt Benjamin symmetrical angle

reflectors, with dust covers, spaced 20 ft. apart along each side of this bay and along both sides of the low bay over Track 1. The service rooms are illuminated with 200-watt Benjamin RLM dome reflectors.

The areas under the platforms are lighted with rows of 100-watt Crouse Hinds Vapolets, spaced about 10 ft. apart along the edges of each platform. Each of the pits is illuminated by recessed 200-watt Crouse Hinds pit lights, with guards, spaced about 20 ft. apart on each side in a staggered arrangement with those on the opposite side. The lights in the oil room are 100-watt vapor-tight Crouse Hinds ceiling fixtures. Numerous receptacles and plug outlets are provided in the pits, above and below the platforms, and in the service rooms.

Right—East end of the shop. The doorway for Track 1 is at the left, and projection containing service rooms at the right. Below—Interior of the cleaning room after equipment had been installed



Although the Alexandria shop is of fire-resistant construction throughout, with the exception of the platform decks, numerous fire hose outlets are located within the building, and it is equipped with a number of wall-type Foamite extinguishers.

Washing Platform

The outside servicing facilities are an interesting feature of this shop. At the washing platform, immediately adjacent to the west end of the shop, incoming Diesels are washed, fueled and sanded, and water is added to the cooling system. At the same time, a preliminary inspection is made so that it is known what work is needed by the time the locomotive is moved into the shop. In addition to the servicing facilities, compressed air connections are available at the outside platform for blowing, or for operating pneumatic tools, so that, if necessary, four locomotives can be worked on simultaneously, two in the shop and two outside.

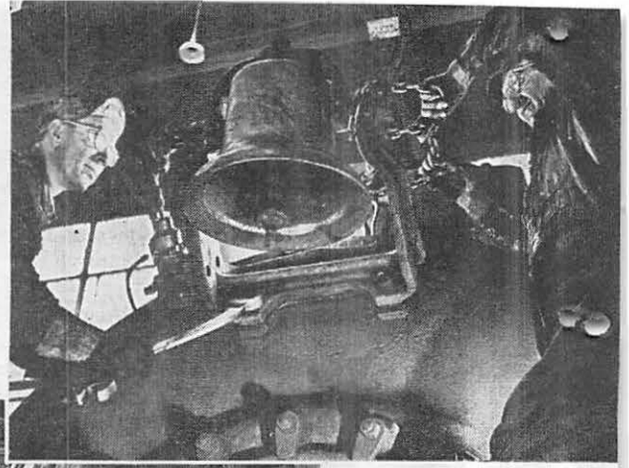
The washing platform area, which includes Tracks 1 and 2, covering an area approximately 64 ft. wide by 228 ft. long, is entirely paved with reinforced concrete. The track areas are depressed about eight inches and the rails are supported on creosoted tie blocks set in the concrete. Gutters along both sides of each track drain into large manholes located at the center of the platform, and water is carried thence into a storm sewer. The platform areas are sloped slightly to drain toward the track gutters and are approximately level with the top of rail immediately adjacent to the tracks.

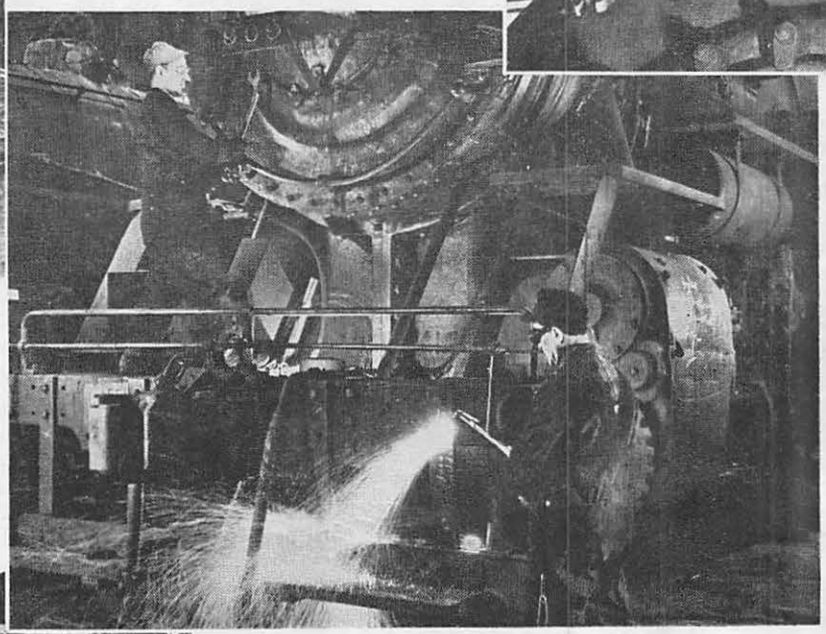
There are three groups of overhead supply lines at the platform, all parallel with the tracks. One of these is midway between Tracks 1 and 2, and the other two extend along the outer sides of the platform. These separate groups of lines are supported on vertical pipe standards made of used rail set in concrete, with angle-iron crossarms welded to the top. Hose connections are made at valve boxes in each group of supply lines, at the platform level, located about 50 ft. apart. All three groups of supply lines include a 3-in. water line, a 2-in. steam line, a 1¼-in. air line and a 1¼-in. return line. In addition, the center group has a 3-in. fuel oil line, connected to a 4-in. main from the fuel oil station.

Six fuel oil tanks, located about 300 ft. south of the washing platform, have about 100,000 gal. storage capacity. An old fuel oil pumping station was enlarged and a new pump was installed, leaving the old pump for standby use. Steam and compressed air are supplied from lines at the locomotive machine shop through pipes supported on a steel bridge extending between the machine shop and new Diesel shop. The bridge, with adequate clearance over the intervening tracks, is a welded structure, fabricated from used angles and channels.

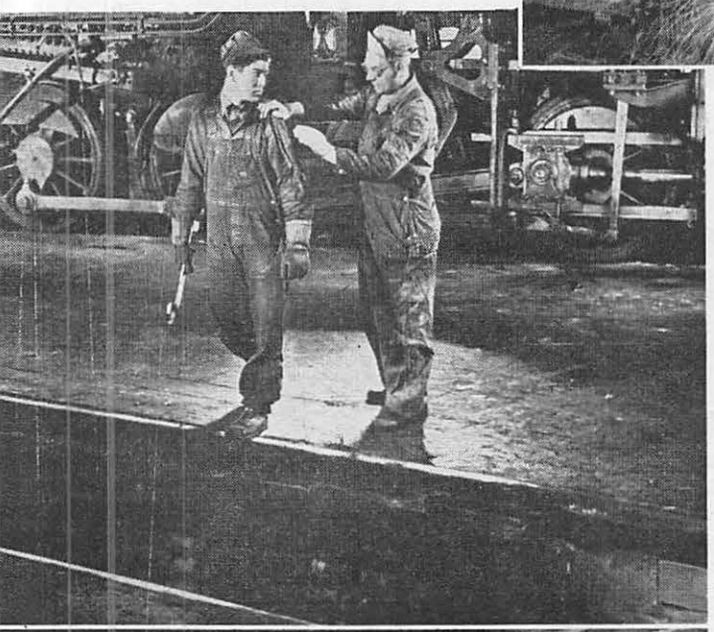
The design and construction of the Alexandria Diesel shop were under the general direction of B. Herman, chief engineer (now retired), and J. P. Chadwick, assistant to vice-president (mechanical), and under the immediate supervision of G. L. Sitton, at the time chief engineer maintenance of way and structures, Eastern lines, Charlotte, N. C., and now assistant chief engineer, at Washington. The Brice Building Company, Inc., Birmingham, Ala., constructed the building, and Morris & Egan, Washington, installed all service piping and equipment.

There are lots of chances to fall in a railroad shop. A floor strewn with parts and tools like this (left) is an invitation to an accident. When removing a heavy part (right), get a chain or other support on it before loosening





When using burning or cutting torches (right), remember you are handling fire. Don't burn a fellow worker through your own carelessness. Locomotive inspection pits (below) are a necessity, but an empty one can be a trap to the heedless

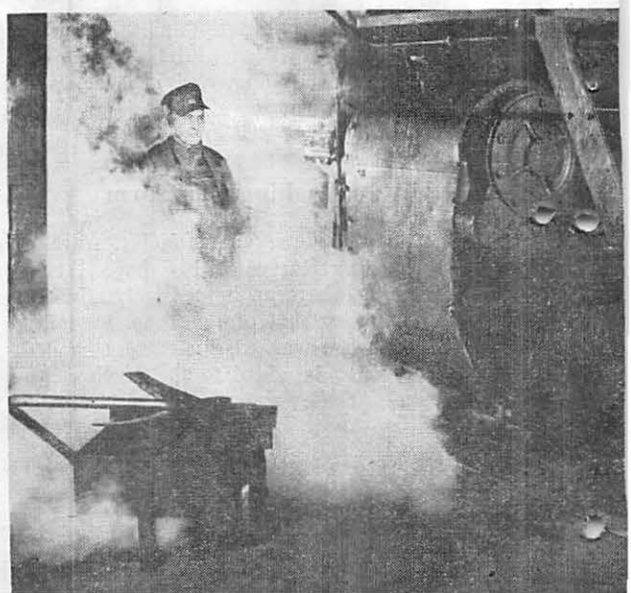


Hazards of Locomotive Shops Minimized by Common Sense

Based on data from some 500 shop and enginehouse accidents, the National Safety Council's slide-film, "Men and Motive Power," illustrates some safety rules which can overcome many shop dangers

All photographs from film "Men and Motive Power." Address all inquiries to National Safety Council, 20 North Wacker Drive, Chicago.

The narrow ledge under the cab window is not a walk. Use it only in an extreme emergency



Don't walk blind. How can you tell what lies ahead when clouds of steam limit visibility?

New Economic Precepts Balk Progress

The employment of governmental coercion to curtail the profits of private enterprise—as on the railroads—results in inability to make necessary investments in replacements, improvements and expansion

By ***SAMUEL O. DUNN***

Editor, Railway Age, and Chairman, Simmons-Boardman Publishing Corp.

TECHNOLOGICAL progress alone cannot cause economic and social progress. The means it provides must be utilized by the investment of capital, if economic and social progress is to result. The scientist, the inventor and the engineer may, for example, provide many kinds of new and improved equipment and materials by the use of which the railways can improve and expand their service and reduce its cost. But all the new and improved equipment and materials made available will have no effect on railway service and its cost unless the railroads are willing and able to buy and use them.

I propose to show (1) that economic and social progress has been hindered in this country for years by policies hindering use of technological improvements; (2) what these policies are; and (3) why these policies must be reversed if we are to have a long period of both technological and economic progress such as we had before the Great Depression. The challenge of the future is a challenge to statesmen, business leaders and labor leaders to adopt policies which will allow technological progress to bestow the great benefits on all which it is capable of bestowing.

The Future at Stake

The world is very sick, economically, socially and physically. Our country is not so sick as most of the world. We have no millions homeless, destitute and starving. But the condition of our country is deceptive, and most of our people are deceived about it. Our country is ill, too, and in danger of becoming more ill. It cannot help much to restore health to the rest of the world unless it regains its own health. And we are not doing much to help it regain its health.

We are having now what most people regard as prosperity. We were told "again, and again, and again" that the measure of our economic condition after the war would be the number of persons employed, and that unless we adopted a lot of policies following a certain pattern we would speedily have millions of unemployed. Well, we have as yet adopted only part of those policies, and the number of employed recently has been the largest in history, whether in peace or war. Does this prove prosperity? Does it forecast a long period of prosperity for all, or even for many? We have not yet begun in the post-war period to show that we can meet the challenge of the future.

Our present high level employment and apparent prosperity are due principally to *temporary* causes. Some are trying desperately to substitute, others are trying as desperately to prevent substitution of, *permanent* causes. The outcome of this struggle may determine the economic, social and political future of the people of America, and even of the people of the world, for generations.

The principal temporary cause of present high level employment and apparent prosperity in this country is the large purchasing power accumulated in the hands of the people and in the treasuries of business during the war. But how long this purchasing power accumulated during the war will continue to stimulate construction, production and employment will depend on how fast it is used up. How fast it will be used up will depend on how fast and how much new purchasing power is created.

And it is not merely the purchasing power of consumers that is important. Large purchases of durable goods—i. e., materials and equipment—by *business* for long periods for maintenance, improvement and expansion of plant are essential to prosperity and high level employment for long periods. How long the present high level of employment and apparent prosperity will last will depend only in comparatively small measure on the amount and use made of the purchasing power accumulated during the war, and almost entirely on how much business and consumer purchasing power is created in future. And we are being threatened with and even subjected to policies tending to prevent creation of the required purchasing power in future.

The railways afford a striking example. They emerged from the war (1) with the largest accumulation of purchasing power in the form of liquid assets, and (2) with the largest accumulation of needs for new and improved materials and equipment that they ever had. Their huge accumulation of needs is due not only to their great reductions of maintenance and investment during the depression, and to wear and tear, deferred maintenance, and inadequate investment during the war, but to technological progress during both the depression and the war.

Improvements Require Capital

An old industry, to take advantage of progressing technology, must make large investments in replacements, improvements and expansion. How much an industry can invest depends on its net earnings.

Because their small net earnings restricted the investment they could make, the railways were able to take only limited advantage of technological progress during the depression. Also during the war the railways were able to take little advantage of technological progress because of government restrictions on the *amount* they could buy and on *what* they could buy.

The technological progress which had made so many kinds of new and improved materials and equipment available, the accumulation of railway needs during the last two decades, the large accumulation of railway liquid assets and purchasing power during the war, seemed to promise rehabilitation, improvement and expansion during the post-war period on an unprecedented scale. To carry out rapidly a program of the magnitude needed the railways must not only draw upon liquid assets accumulated during the war, but must earn net operating income averaging at least $1 billion a year. They actually did earn an average of $1 billion a year in the decade ending with 1930 when they made a large increase in their investment; and the increase in their investment made then enabled them not only to handle satisfactorily the traffic of the decade before the depression, but to meet the tremendous demands of the war. For there was no increase at all in their total investment in the depression decade 1931-1940 when their net

This article is an abstract of an address delivered to a meeting of the American Society of Mechanical Engineers at Chicago on August 7.

operating income averaged only $\frac{1}{2}$ billion annually.

But what have we recently seen, and what do we see now, actually occurring? Construction and production, although they have not approached the volume to which they should expand in the post-war period, already are creating a freight traffic that is overtaxing railway facilities. But arbitration boards awarded large advances in railway wages retroactive to January 1. Government intervention caused further advances in railway wages in May. The prices of steel, coal and almost everything the railways must buy have been forced up by government-managed settlements of strikes in other industries. The railways asked the Interstate Commerce Commission to authorize a substantial advance in freight rates effective on May 15, but the Commission refused to do so. In consequence, instead of earning net operating income at an annual rate of at least $1 billion a year, our railways as a whole made almost no net operating income in the first half of this year, and, after fixed charges, incurred a deficit which had to be paid from the liquid assets accumulated during the war.

Profitless Prosperity

The Commission finally authorized an advance in rates of about $400 million a year effective on July 1. But railway wages and all other unit costs will be higher in the second half of the year than in the first half of the year. Hence, the financial results of railway operation in the entire year 1946 will be among the poorest in history, although the railways will this year handle the largest peacetime traffic in history. The earnings made by the railways in their first fiscal year of the post-war period will contribute nothing toward the great program of rehabilitation, improvements and expansion which, in the national interest, they should carry out in the post-war period. And this program will be deferred as long as present policies are continued, because such a program can be carried out only during a period of relatively large net earnings.

The situation with which the railways are confronted powerfully illustrates the principal point that it has been my purpose to emphasize here. Why are we threatened with indefinite delay or actual prevention of the great progress in reducing costs and improving and extending service that could rapidly be made on our railways? *It is not because of lack of new and improved materials and equipment;* innumerable kinds of them have been made available by the scientist, the inventor and the engineer. It is not because of unwillingness of manufacturers to produce them; manufacturers would gladly, if afforded opportunity, produce everything the railways need and desire. It is not because of lack of desire by the railways to buy and use improved equipment and materials. Railway managements desire to buy, and expand, and improve, as never before.

What, then, is the trouble? The trouble is, that *years ago economic statesmanship began breaking down and falling behind technological progress,* and that it is still daily falling farther behind technological progress. This is not true merely of the economic statesmanship applied to our railroads; it has become true of the economic statesmanship applied to American industry as a whole. And it is not true in the United States alone; the decline of economic statesmanship is threatening ruin throughout the world.

The last half century's history of the United States illustrates the point, so vitally important to the future of all of us, that I am trying to drive home. Owing to advancing technology and large investment, there was almost unbroken increase throughout the thirty years ending with 1929 in construction, production, transportation and consumption *per worker* and *per inhabitant.* Unemployment often has been attributed to technological progress. But almost throughout this thirty years of rapid technological progress the increase in the number of persons employed was relatively greater than the increase in the country's population.

There is little resemblance between the three decades that ended in 1929 and the almost two decades since then. We know that technological progress has continued; and yet the last seventeen years have been marked by less economic and social progress than any previous equal period in the history of the United States. Measured by previous experience, the twelve years 1930-1941 all were years of sub-normal construction, production, distribution and employment in spite of large government expenditures to stimulate them. During the war, total production and employment were abnormally large, but this was because of huge deficit spending by government and the piling up of taxes and debt for carrying on the war.

Throughout the war we looked forward hopefully and longingly to the post-war period in which, owing to technological progress, we were going to have a new heaven and a new earth. But we have spent the first post-war year in fighting over the division of goods which will never exist until we produce them and which we will never produce until we quit fighting over their division.

We have had optimistic assurances from public officials in Washington that within recent months production for peace-time purposes has risen to new high levels. Even if these assurances were true, they would not have the significance that those making them try to give them. The last year in which we had a record peace-time production was 1929. For many years prior to that time production per worker and per capita increased in almost every year. Since 1929, the country's population has increased 18 million, or 15 per cent. If production per capita had increased as much annually in the seventeen years since 1929 as it did in the thirty years ending with 1929, total production would now be about 60 per cent larger than in 1929. And owing to lack of normal production for peace-time purposes during the sixteen years of depression and war, there have developed shortages of peace-time goods and services of almost every kind which can be remedied only by production for years at a much higher level than would be required if these shortages had not accrued. Hence, even if peace-time production were vastly larger now than ever before, we would only be restoring conditions of supply and demand that were always normal before the depression and the war.

Wasted Savings

The increases in the demand for civilian goods which recently have occurred have been largely due to the liquid assets accumulated in the hands of the people and in the treasuries of business during the war. These liquid assets could be used to remedy many of the shortages that exist. But already, in no small measure, they have been wasted. They have been used by millions of families to pay living expenses, while the wage earners of these families have been on strike. The railways were obliged, during the first half of this year, to waste liquid assets in paying deficits, because large increases in their operating expenses were made without any advances in their rates. Every large industry in the country—automobile, coal, steel, and many others—which has had its production seriously reduced or stopped by strikes, has had to use large parts of its liquid assets to pay losses.

And all claims to the contrary notwithstanding, and in spite of the fact that total employment has risen to a new peace-time high, the available evidence indicates that total production has not risen anywhere near to the level required to supply the needs of the people. General Ayers of the Cleveland Trust Company cited among others the following facts in a recent bulletin of that bank: Production of bituminous coal was 22 per cent less in the first half of 1946 than in the first half of 1945. Production of automobiles was 67 per cent less than in the first half of 1941. Production of steel was 37 per cent less than in the first half of last year. Production of copper was 47 per cent less in the first

five months of 1946 than in the first five months of 1945. The railways have been able to get but few of the many passenger cars that they have had on order. According to the index of the Federal Reserve Board, the volume of total industrial production in the first half of 1946 was 29 per cent less than in the first half of 1945. We have been increasing many shortages instead of reducing them.

I have briefly outlined two recent periods in the history of the United States which, although consecutive, present stronger contrasts to each other than any two previous periods, consecutive or non-consecutive, in the nation's history. Each period included participation in a world war. During each there was rapid progress in technology. Throughout one there was great economic and social progress. During the other there has been, on the whole, no economic and social progress at all. Because there was a steady increase in production per worker and per capita, the American people were better off in almost every year of the thirty years ending with 1929 than they had ever been in any previous year. Because there has not been since 1929 any sustained increase, but usually actual reduction, in the production of civilian goods, the American people as a whole have never been as well off in any year of the last seventeen years as they were in every year of the preceding seventeen.

The Beginning of a Revolution

I have expressed the opinion that this cessation of economic and social progress, in spite of the continuance, perhaps acceleration, of progress in technology, has been due to a breakdown of economic statesmanship. In what way has this breakdown of economic statesmanship been shown? It has been shown by increasingly successful efforts to destroy the economic system of *voluntarism*, which we long had, and to substitute for it an economic system of *coercion*.

A perfect economic system of voluntarism would be one under which all buyers of goods and services, whether individual consumers or business concerns, would buy whatever goods or services they desired and could pay for, and under which all those who produce and market goods or services would compete on equal terms in improving old goods and services, in developing new goods and services, in reducing costs of production and distribution, in fixing the prices or rates charged for goods and services, and increasing their production and sale to the utmost. There never has been any such *perfect* system of economic voluntarism. Some industries are naturally monopolistic and have to be controlled by government. And there is always a tendency for monopoly or monopolistic practices to be adopted by producers and sellers in naturally competitive industries for the purpose of dictating prices to buyers.

It remains a fact that we had in this country prior to a quarter century ago virtually an economic system of voluntarism, while more recently, and especially since the beginning of the New Deal, we have been substituting for it more and more an economic system of coercion. The method by which we have been doing this has been that of taking power from the people as individuals and concentrating it in government and monopolies—to some extent business monopolies, but in much larger measure labor monopolies. And in spite of continuing technological progress, we have been halting in our economic progress, because we have been in this way destroying our economic freedom.

This growing tendency to concentrate great power of any kind anywhere is contrary to the former spirit of all our political and economic institutions and marks the beginning of a revolution which, if not arrested, will stop progress in this country. It will stop technological progress, because technological progress has been made and can be made only under conditions of political and economic freedom. And whatever stops technological progress will stop economic progress, because economic progress is impossible without technological progress. Great concentrations of power inevitably stop progress, because great power, regardless of who has it, always is unintelligently and tyrannically used—always used for the real or supposed benefit of those who have it and at the expense and to the detriment of everybody else.

I will try to clarify what I mean regarding the substitution of coercion for voluntarism by a few illustrations.

Price fixing.—The abandonment of economic voluntarism was begun in this country by the legislation empowering the Interstate Commerce Commission to fix railway rates. The law merely authorized the Commission to fix "reasonable rates." But almost immediately the Commission began, and it has continued, to use its rate-making power to regulate and restrict profits. How much profits an industry makes determines how much capital it can get to invest in new and improved equipment and materials. Hence, the Commission has used the power of government to restrict the opportunity and ability of the railways to take advantage of advancing technology for the purpose of improving and expanding their service and reducing its cost.

A striking example is the Commission's delay this year in advancing rates, thus causing railway deficits, and then authorizing an advance so small that a wholly inadequate net return will be made unless and until a much larger advance in rates is authorized.

Government regulation of prices in other industries began with the passage in 1933 of the National Recovery Act and the Agricultural Adjustment Act, one of the purposes of which was to force prices up to the general level of 1926. Prices were not raised to that level, but the substitution of coercion for competition in price-making contributed toward prolonging the depression.

Regulation of Profits

Control of all prices, including housing rentals, was adopted and was doubtless necessary, during the war. It was continued during most of the first postwar year and has now been revived. Here again, price-fixing by coercion instead of competition was speedily used to restrict profits, this restriction of profits having the same tendency to restrict progress in other industries as in the railroad industry.

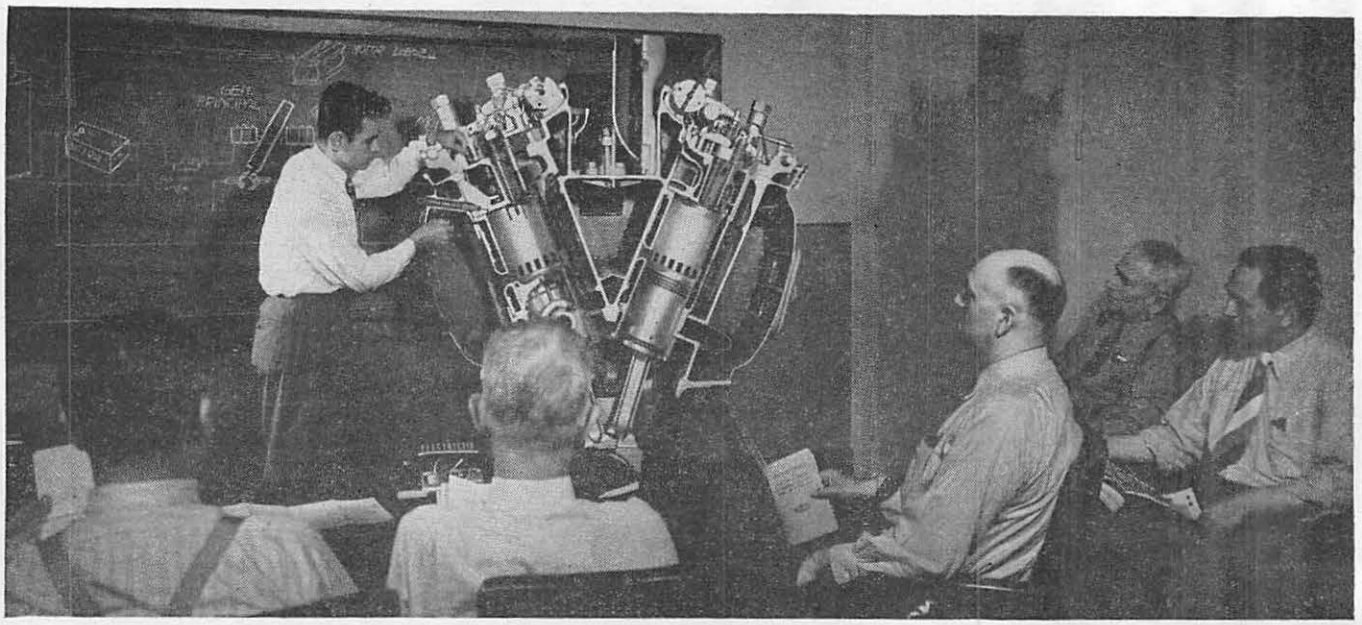
Taxation.—Use of the power of government to collect taxes from all business and all the people and use them to subsidize some business and some people began in the field of transportation.

The policy of increasing taxes to provide subsidies was expanded in 1933 by the appropriation by the National Recovery Act of $4 billion to be spent on so-called "public works," and has since been extended into one field after another. One of the worst examples is in the housing field. Before the war the government built housing all over the country and rented it at less than cost. Since the war it has provided $400 million to subsidize the production of materials for housing and thereby keep down their prices.

The Wagner-Ellender-Taft bill proposes the provision of government-subsidized housing in urban and rural communities throughout the country. All such subsidization coerces those taxed into paying for goods and services that they will not buy voluntarily and hinders the fixing of prices by competition, which is essential to the balancing of prices in a free market. And, for the long pull, unless we balance prices in a free market, we cannot have economic progress under private enterprise and will continue drifting toward a totalitarian system of national socialism or communism.

Monopolies.—Monopolies and monopolistic practices are means by which the monopolists coerce buyers of goods or labor into paying prices or wages fixed by the monopolists, and all such monopolies and monopolistic practices in naturally competitive industries were unlawful in this country until within the past fifteen years. If a labor union or combination of unions has sufficient pow-

(*Continued on page 227*)



One corner of the E-M schoolroom at La Grange, Ill., where the Mexican class received all instructions in their native language

Diesel Freight Power for Mexican Line

Electro-Motive instructs National Railways men in operation and repair of 14 locomotives soon to be delivered

EARLY this month, the National Railways of Mexico will receive the first two of 14 Diesel-electric freight locomotives, purchased from the Electro-Motive Division, General Motors Corporation. These two-unit 2,700-hp. locomotives are the first to be sold by Electro-Motive south of the border, and the first to operate in freight service on the main lines of the National Railways. They are powered by 16-cylinder Diesel engines, rated at 1,350 hp. per unit, and equipped with dynamic brakes for mountain operation.

The territory over which ten of these locomotives will operate is one of the most rugged in Mexico. They will haul tank cars from Tampico to San Luis Potosi over the Cardenas division, where they will encounter grades of three per cent and curves of over 22 deg. Starting at sea level, they will climb 4,300 ft. to Cardenas, and then proceed to San Luis Potosi, which is at an elevation of 6,000 ft. These locomotives will be equipped with a 65 to 12 gear ratio for a maximum starting tractive force of 115,000 lb., based on 25 per cent adhesion, and a top speed of 45 miles an hour. With the aid of this modern power, the National Railways expect to clean up a division which has long been congested, due to the severe operating conditions. The other four locomotives will be equipped with a 62 to 15 gear ratio and will have 1,600-lb. steam generators, so they can be used in both passenger and freight operation in the districts that run north and south.

A Congested Division

The purchase of this Diesel motive power for Mexico resulted directly from a study made by Electro-Motive at the request of the National Railways during the latter part of October, 1944, when war conditions had practically stopped the shipment of oil by tanker and necessitated hauling a large volume of petroleum products from oil fields and refineries near Tampico on the Gulf coast 274 miles westward to San Luis Potosi for distribution to the interior of Mexico.

The bottle neck of this operation was the 50-mile Cardenas section between Tamasopo and Cardenas, where the excessive grade and curve conditions mentioned caused frequent frame breakage and made it difficult to keep the steam power then in use out of shop for repairs. It was by no means unusual to have 600 to 900 cars tied up on this division where serviceable locomotives were given their full tonnage rating and a shortage of power prevented sending light locomotives to pick up cars which had been set out. The attendant congestion further increased delays to through trains, inasmuch as few passing tracks were not blocked by these cars. The combination of these conditions resulted in unsatisfactory service and placed the central part of Mexico in a serious position due to the lack of petroleum products.

Another problem was the necessity of hauling a large amount of the water required to operate the railroad due to the poor quality of water on the Cardenas division and the fact that water in any form was not available over many months of the year at some of the higher altitudes. The situation became so critical that some consideration was given to constructing an oil pipe line between Tamasopo and Cardenas.

It is believed that, with the new Diesel freight power, a 2,000-ton train can be hauled up the 1½-per-cent grades by one locomotive and two can take the same train over the 3-per-cent grade. Three trains a day each way with 2,000 tons each will handle the present business plus the contemplated increase in busi-

ness which the oil companies promise when the schedules are improved. One of the 2,700-hp. Diesel locomotives can readily haul more than 2,000 tons over certain sections of the railroad, but it is recommended that the practice of giving locomotives their full rated tonnage on all sections of the line be discontinued in order to avoid the possibility of clogging passing tracks.

Use of the new power will eliminate the necessity of hauling water and materially reduce the tonnage of fuel formerly required with steam operation. Fuel stations have been laid out so that fuel for the Diesel locomotives will be taken at Tampico. Fuel stations will also be located at Tamasopo and San Luis Potosi, but are to be used only in emergencies or to fill the tanks sufficiently for a return trip to Tampico. The maintenance point chosen was San Luis Potosi since this point is also on the main north and south line where Diesel locomotives may be operated in the future to Mexico City or the border.

Service Organization

As soon as it became apparent that Electro-Motive Diesel locomotives were slated for operation in Mexico, the service department of this company undertook an intensive program of training Mexican railway men who would be responsible for operation and maintenance. The importance of overcoming the language barrier became immediately apparent and Electro-Motive, therefore, undertook the training of a native Mexican to be stationed in Mexico as a district service engineer. The young engineer selected, Mariano A. Montero, was brought to the Electro-Motive plant, LaGrange, Ill., and thoroughly instructed for a period of 15 months, or until qualified to give the National Railways every assistance customarily furnished to any railroad in the states, without encountering the difficulties that arise from differences in language, habits, and general way of life between the two countries. During the early months of his assignment in Mexico, Mr. Montero will be aided by two members of the LaGrange service organization. In addition, Electro-Motive will send a crew of 10 operation instructors to help qualify locomotive enginemen and firemen of the National Railways in handling Diesel-electric locomotives.

Another early step of Electro-Motive was helping the mechanical department of the National Railways in setting up maintenance facilities. The requirements were analyzed and an E-M standard design of Diesel shop and other maintenance facilities recommended. As a result, the Diesel shop now being erected at San Luis Potosi will combine many of the latest and most up-to-date improvements in Diesel shop construction. The shop, which will be completed early next year, will be equipped with drop tables, traveling cranes, electrical and wheel shops, engine overhaul room, its own storeroom and office, and other standard facilities of the most modern Diesel shops. It will have depressed floors and platforms, and a basement for storage space and for installation of tanks, water treatment, and lubricating-oil reclaiming apparatus.

Service Literature in Spanish

It was felt that if the Electro-Motive Division was going to make available to the National Railways all the information needed for the proper operation and maintenance of Diesel locomotives, this information should be offered to the railroad in a language that could be understood by its personnel, namely, Spanish. Arrangements were therefore made to secure the services of a group of technical translators and stenographers, who were brought to LaGrange from Mexico. First, they were enrolled in the LaGrange school and given some preliminary training before the actual translation of Electro-Motive service texts was started. The translators and stenographers, who were men with a railroad background, worked under the Service Publications Department, and translated operating manuals, engine manuals, instructors' guides, bulletins, parts catalogues and other miscellaneous literature. All this information will be ready and in the hands of railroad officers before the actual delivery of the locomotives.

Beginning May 13, 1946, and for two weeks thereafter, a group of seven men from the railroad's mechanical department took a course in Diesel locomotive maintenance and operation, conducted for the first time in a foreign language. Mr. Montero conducted the course in Spanish, and by this means full comprehension of the subjects discussed in the classroom was assured. The men heard the course in their own language, asked questions in their own language, and read descriptions and manuals and instruction guides, written also in their own language. On June 17, a second group came to LaGrange, representing the operating department of the railroad, and the same thorough training program was conducted, also in Spanish.

Besides classes held for the two groups mentioned, three other representatives of the National Railways, including one road foreman and two instructors in the railroad's educational department, visited the plant and were given every opportunity to witness manufacturing processes and to partake in both theoretical and practical training courses.

* * *

New Economic Precepts Balk Progress

(*Continued from page 225*)

er to shut down most or all of a large industry, it is plainly a monopoly. If it actually shuts down most or all of a large industry, as repeatedly has occurred recently, it plainly exercises much more restraint of trade and commerce than any business monopoly ever has attempted to exercise. Why, then, is it not now unlawful for labor union leaders to do what it always has been unlawful for business leaders to do? It is because the Norris-LaGuardia Act and other laws passed within the past fifteen years have specifically legalized and encouraged the acquisition and use of unrestricted monopoly power by labor union leaders. And naturally the labor leaders use and abuse the great power thus given them, as everybody else who ever has been given such great power always has used and abused it to the detriment of everybody else.

Our laws provide for the settlement of disputes regarding wages and working conditions by collective bargaining, arbitration, and, in the case of railway labor disputes, by hearings and recommendations of fact-finding boards appointed by the President of the United States. But labor leaders, by using the monopoly power conferred upon them by government to threaten and actually cause extensive and even nation-wide strikes, have replaced voluntarism with coercion in the settlement of labor disputes. And within the past five years, in their use of the coercive power of monopoly, they have been repeatedly backed by the coercive power of government itself, with the result of securing advances in wages and more and more "featherbed" working rules which prevent the increases in production per worker and the reductions of costs that should be the results of technological progress. High level employment is valueless unless it causes correspondingly high level production.

I could multiply examples of the substitution of coercion for voluntarism in our economic affairs. Every such example I have cited, every additional example I could cite, illustrates the tendency to use coercion for one major purpose—that is, to curtail the profits of private enterprise. But whatever tends to restrict the profits that could be made under competition in a free market tends to curtail the capital available for investment in the improved equipment and materials made available by technological progress. And to what-

ever extent investment in new and improved equipment and materials is hindered or prevented, to that extent every kind of economic and social progress is hindered or prevented.

I do not know whether this trend toward the substitution of coercion for voluntarism can be reversed, or even arrested. But I am sure that all of us who desire to recover the freedom of which it already has deprived us, and the opportunity for progress which can exist only under a system of freedom, must become acutely aware of this prevailing trend, and exert ourselves to the utmost to reverse it.

We can recover prosperity and maintain it for a long period only if we overthrow the policies of coercion which have increasingly prevailed for fifteen years, and revive the policies of voluntarism which usually prevailed in this country throughout all its previous history. Present policies are plainly leading us toward some system of communism or naziism, under which the individual is motivated by fear of how those having great power will use it, and not by the desire, the hope and the opportunity of achievement and success which have inspired all those who have furnished leadership and driving force in free societies. And only in free societies have technological, economic and social progress ever been long achieved and maintained.

Transportation Agencies as Taxpayers

The following paragraphs are excerpts from an address by W. G. Vollmer, president of the Texas & Pacific, at the Cincinnati meeting of the Railway Tie Association, July 15:

Of the four principal systems of transportation, the railroad is the only one that owns and maintains its fixed plant facilities and pays taxes upon all of it. By fixed plant, I mean the roadway, rails and fastenings, signal systems and all the other structures and equipment necessary to provide safe and efficient freight and passenger rail transportation service. Other transportation systems have been spared the expense of building and maintaining their fixed plant facilities. The taxpayers have provided them with magnificent highways, elaborate and expensive air terminals and services, and costly inland waterways.

Subsidized Competitors—All that the other commercial forms of transport need for the operation of their businesses are the vehicles and equipment and something to maintain and keep these in condition. To illustrate, let me cite the following example: If a highway bridge is swept away by flood water, the commercial trucks and buses simply use another highway while some government agency makes the necessary repairs. But if the same flood water destroys a railroad bridge, the railroad must purchase the materials necessary for repairs and make these repairs at its own expense; and at the same time suffer financial loss due to interrupted traffic.

More than 300 terminal-type airports have been constructed in the United States by various city, state and federal governments. These airports are almost wholly operated and maintained at public expense. In Texas, there is a large and extensively used airfield which cost the taxpayers nearly $3,500,000 to provide. If the ordinary principles of business applied to the operation of the airfield—interest on and amortization of the capital investment, and out-of-pocket costs of maintenance and operation, run the annual expense to approximately $250,000. Three commercial airlines use this field and for the privilege of this use they pay slightly more than $14,000 annually, in addition to which the municipal government, which owns and operates it for the taxpayers, receives approximately the same amount of revenue from the pay toilets, pay telephones, and various concession rentals such as restaurant and newsstand. Based on the number of flights daily—landing and take-off considered as one operation—the city's unit cost per flight amounts to about $8.23. Of this unit cost the three airlines pay 53¢; and the taxpayers pay the remainder of $7.70.

In cities large and small, all over the nation, the railroads own, maintain, operate, and pay taxes on their station facilities. On the other hand, the commercial airlines that use the 300 or more air terminals neither own, maintain nor pay taxes on the expensively built and elaborately equipped taxpayers' air terminals which are used to conduct their businesses, and many times do not pay much, if any, of the operating costs.

The railroads are not opposed, in any sense, to the commercial airlines, nor to legitimate capital expenditures for airports essential to the public welfare. But the railroads do feel justified in opposing the use of the tax-provided air terminals by commercial airlines without payment of a reasonable and equitable user charge. Since these commercial airlines are engaged in business for profit, they should be subject to the same principles of business and costs that apply to all competitively operated enterprises.

Inland Waterways—It is customary to think that rivers are natural ways of transportation, but that is by no means true. In order to be serviceable to boat and barge operations, rivers literally have to be rebuilt. The Missouri river is a good example of this—to dredge this stream and make it navigable from its mouth to Kansas City cost $275,000 per mile, and the annual maintenance cost is $5,000 per mile. From Kansas City to Sioux City, the federal government spent $243,000 per mile to make the river navigable, and the annual maintenance cost per mile is $6,000. Yet we hear it repeated over and over that water transportation on our inland waterways is cheap. No transportation is cheap or economical if it must be heavily subsidized in order to compete with a self-sustaining system. Subsidies to any form of transportation compel economically sound enterprises to support those which are subsidized.

The railroads are certainly not opposed to good highways and streets, nor are they opposed to the taxpayers, if they elect to do so, furnishing the airlines with air terminals and service facilities, and the inland water carriers with improved and federal-maintained waterways. What the railroads do oppose, and feel justified in criticizing, is the policy of underwriting, through citizen taxes, the legitimate use expense of other commercial transportation agencies engaged in business for a profit.

Need For Equal Treatment—A sound, solvent and efficient national railway system is essential to continued economic progress. The railroads are the steel crossbeams upon which our whole economy rests. The progress of American commerce and industry is measured in terms of transportation—rail transportation. Railroads are so vital to the safety of our country in time of war, and to the welfare of the nation in time of peace, that they must continue to operate, either under private enterprise and initiative or under government control. The latter alternative is certainly not in keeping with the economic philosophy of the majority of the people in the United States.

America was founded upon and has grown to greatness under the free, competitive enterprise system. Subsidies that give one system of transportation competitive advantages over another are not in keeping with the American system. All the railroads ask is that the principles of free, competitive enterprise apply to all. Let the service each renders the nation be the measure by which its existence is justified. Real progress comes not through the oppression of one industry to promote another, but through equal opportunity for all. The railroads seek only that. Given the opportunity to compete on an equal basis, the railroads will continue to set the pace of progress in America in the future as they have in the past.

Organize to Promote Export Market

Railroad equipment manufacturers in group of bankers and industrialists named by President to foster overseas market for capital goods

A COOPERATIVE movement—with representatives of manufacturers, bankers, and government agencies participating—is in active operation with the objective of stimulating and expediting exports of U. S. industrial equipment, including railroad equipment, to those foreign countries in need of reconstruction, either because their industrial plant was damaged by the war or deteriorated for lack of renewals and maintenance. In order to further this type of activity among other purposes, President Truman has named the following committee of industrialists and bankers: Chairman Winthrop W. Aldrich (chairman, Chase National Bank); Fowler McCormick (chairman, International Harvester Company); H. H. Pease (president, New Britain Machine Company); Champ Carry (president, Pullman-Standard Car Manufacturing Corporation); Irving S. Olds (chairman, United States Steel Corporation); Gordon S. Rentschler (chairman, National City Bank); Walter J. Cummings (chairman, Continental-Illinois National Bank & Trust Co.); L. M. Giannini (president, Bank of America); A. W. Robertson (chairman, Westinghouse Electric Corporation); Paul G. Hoffman (president, Studebaker Corporation); Edward Hopkinson, Jr. (partner, Drexel & Co.); Tom K. Smith (president, Boatmen's National Bank of St. Louis).

This committee has been asked by President Truman "to work closely with the National Advisory Council"—which is the government body (headed by the Secretary of the Treasury) which establishes government policy regarding financial and trade relations with foreign countries.

What and How Much?

There is no question, in general terms, that many if not most foreign nations need a great deal of industrial equipment, including railroad equipment, for their economic rehabilitation. But just how many machine tools and, say, cars and locomotives, does each country need, and how relatively acute is the need of one country compared to that of another? Can any of these countries pay in whole or in part for the imports they require—and, if they cannot, can any of them put up collateral to warrant the granting of private credit? Are there instances where national policy would favor the extension of government credit in circumstances which do not warrant such accommodation by banking and industry?

These are some of the important questions of detail which have to be answered specifically before any but the most urgent foreign demands for American capital goods can be dealt with, but which, when adequately answered, should serve to establish a large and continuing export market for American industrial equipment for a considerable term of years.

From the standpoint of the railway equipment industry, a potential foreign market of $200,000,000 a year for five years is considered in the realm of realizable probability. This would represent 1,000 steam locomotives and 40,000 freight cars annually, which, it is estimated, would give employment to 150,000 American wage-earners. It is pointed out that, while domestic car-building facilities cannot very well be devoted to increased manufacture for export during the current shortage of materials, this situation will be rapidly remedied as soon as the materials shortage is relieved.

Helpful to the Railroads

Then, domestic car builders will have much capacity to spare, regardless of the magnitude of their domestic business. The locomotive builders can even now accommodate a much larger volume of export business than they have, because of the fact that most of their foreign orders are for steam locomotives, whereas domestic orders are very largely for Diesels. From the standpoint of the railroad industry in the United States, a substantial foreign market for equipment builders is advantageous, because of the contribution of such business to domestic traffic and employment; and because it gives the equipment builders a larger gross business over which to spread their overhead expenses.

Private lending institutions in this country—remembering their experience with foreign loans after World War I—are not going into the foreign lending field again, indiscriminately and on a large scale. The federal government in many instances can be—or, at least, is—more lenient in granting foreign credits than a private institution, because there are considerations of international politics involved in some of these loans. For instance, the government believes it can risk some of the people's money in helping to get a potentially friendly nation back into production; and, when actual production begins, if the foreign country has some products with which to pay for its imports, its chances of getting additional credit as needed from private sources in the United States are greatly improved.

"Our Common Aim"

The Export-Import Bank is the government agency which so far has done most of the "political lending" abroad, but it has about reached the statutory limit of its lending power. This limit may, however, be extended by Congress. Beyond that, the International Bank, established under the Bretton Woods agreement, will also be empowered to make rehabilitation loans. In appointing the committee of industrialists and bankers, President Truman said:

"I am anxious that there should be the fullest cooperation between the governmental agencies and private industry and finance.

"Our common aim is the return of our foreign commerce and investment to private channels as soon as possible. . . . Our foreign trade, export and import, must in the long run be privately financed if it is to serve well this country and world economy."

This cooperative enterprise was initiated by Charles J. Symington, chairman of the Symington-Gould Corporation, and of the Office of International Trade in the Commerce Department, for the dual purpose of enlarging the markets for American manufacturers, while at the same time serving the cause of world prosperity and amity and promoting domestic economic activity and employment.

Leading railway equipment manufacturers have given their approval to the effort, and the Steam Locomotive Export Association, Inc., the Railway Car Export Association of America, and the American Railway Car Institute are cooperating.

GENERAL NEWS

Six Months Deficit Totaled $27,000,000

Net railway operating income for the same period was $152,791,410

Class I railroads in the first six months of this year had an estimated deficit, after interest and rentals, of $27,000,000, as compared with a net income of $326,801,745 in the corresponding period of 1945, according to the Bureau of Railway Economics of the Association of American Railroads. The six-months' net railway operating income, before interest and rentals, was $152,791,410, compared with $548,339,201 in the same period last year.

June's estimated results show a net income after interest and rentals, of $13,000,000, compared with a net income of $65,754,740 in June, 1945, while the net railway operating income for that month was $38,080,305, compared with June 1945's net railway operating income of $99,916,182. In the 12 months ended with June, the rate of return averaged 1.65 per cent, compared with 3.95 per cent for the 12 months ended June 30, 1945.

Gross Down 23.8 Per Cent—Gross in the six months totaled $3,577,307,662, compared with $4,697,322,658 in the same period of 1945, a decrease of 23.8 per cent, while operating expenses amounted to $3,085,325,344, compared with $3,194,524,027, a decrease of 3.4 per cent.

Sixty-eight Class I roads failed to earn interest and rentals in the first six months, of which 31 were in the Eastern district, 10 in the Southern region and 27 in the Western district.

Class I roads in the Eastern district in the six months had an estimated deficit of $60,000,000, compared with a net income of $130,231,269 in the same period of 1945. For June alone, their estimated deficit was $900,000, compared with a net income of $23,218,267 in June, 1945.

The same roads in the six months had a net railway operating income of $21,685,366, compared with $235,422,769 in the same period of 1945. Their net railway operating income in June amounted to $12,656,996, compared with a net railway operating income of $43,692,076 in June, 1945.

Gross in the Eastern district in the six months totaled $1,565,188,466, a decrease of 21.9 per cent compared with the same period of 1945, while operating expenses totaled $1,403,430,577, a decrease of 4.1 per cent.

In the South—Class I roads in the Southern region in the six months had an estimated net income of $3,600,000, compared with a net income of $48,830,400 in the same period of 1945. For June, they had an estimated deficit of $500,000, compared with a net income of $7,431,116 in June, 1945.

The six-months' net railway operating income in the Southern region was $32,002,301, compared with $80,450,968 in the same period of 1945. The net railway operating income in June amounted to $4,117,558, compared with $11,975,523 in June, 1945.

Operating revenues in the Southern Region in the six months totaled $521,667,618, a decrease of 22.3 per cent compared with the same period of 1945, while operating expenses totaled $438,273,526, an increase of 1.5 per cent.

Class I roads in the Western district in the six months had an estimated net income of $29,400,000, compared with $147,740,076 in the same period of 1945. For June, they had an estimated net income of $14,400,000, compared with a net income of $35,105,357 in June, 1945.

Those same roads in the six months had a net railway operating income of $99,103,743 compared with $232,465,464 in the same period of 1945. Their net railway operating income in June, amounted to $21,305,751, compared with $44,248,583 in June, 1945.

Gross in the Western district in the six months totaled $1,490,451,578, a decrease of 26.3 per cent compared with the same period of 1945, while operating expenses totaled $1,243,621,241, a decrease of 4.3 per cent.

CLASS I RAILROADS—UNITED STATES

	1946	1945
Month of June		
Total operating revenues	$611,939,411	$819,945,587
Total operating expenses	516,856,142	541,490,416
Operating ratio—per cent	84.46	66.04
Taxes	44,773,082	161,583,073
Net railway operating income (Earnings before charges)	38,080,305	99,916,182
Net income, after charges (estimated)	13,000,000	65,754,740
Six Months Ended June 30, 1946		
Total operating revenues	$3,577,307,662	$4,697,322,658
Total operating expenses	3,085,325,344	3,194,524,027
Operating ratio—per cent	86.25	68.01
Taxes	267,758,052	861,907,050
Net railway operating income (Earnings before charges)	152,791,410	548,339,201
Net income, after charges (estimated)	Def 27,000,000	326,801,745

Railroads Will Increase Car Supply, Says Pelley

Will do it through program being suggested by the O.D.T. or "otherwise"

Railroads will increase their supply of freight cars through the government-financing program being suggested by the Office of Defense Transportation "or otherwise," J. J. Pelley, president of the Association of American Railroads announced in an August 2 statement. The statement was the first official comment from the railroads on O. D. T. Director J. Monroe Johnson's proposal that 50,000 box cars be purchased by the Reconstruction Finance Corporation for lease to the railroads (see *Railway Age* of August 3, page 195, and July 20, page 99).

While stating that the O. D. T. suggestions "are being expected by the railroads and the several government agencies concerned," Mr. Pelley at the same time called attention to materials shortages which are delaying deliveries of cars already on order. He also mentioned the drop in car-utilization efficiency which has occurred during the past year. On the latter score, he followed through three days later, joining with C. J. Goodyear, president of the National Association of Shippers Advisory Boards, in an August 5 appeal "to all users of railroad transportation." Among other things, the appeal sought cooperation on the matter of having forces on hand to unload freight cars on Saturdays "and even on Sundays."

Private Financing Proceeds—Meanwhile, Mr. Pelley's August 2 comment on the O. D. T. proposals had said further that "several railroads are interested in the program," while others "are proceeding with the purchase of needed cars under plans which involve private financing." Next came the A. A. R. president's assurance that the supply of cars would be increased either through the O. D. T. program "or otherwise," and his reference to the materials shortages and "other production difficulties."

With respect to the materials situation, O. D. T.'s July 30 statement on the Johnson program indicated that consideration was being given to the possibility of using aluminum in place of steel and lumber for car bodies. It is understood that Colonel Johnson has since been advised that aluminum is as scarce as steel and that there could be no deliveries of aluminum for car construction for about a year.

"During the first six months of this year," Mr. Pelley said of the delivery situation, "the railroads received fewer new

cars than in the corresponding months of last year, although orders were greater. At the same time, the number of worn-out cars dismantled and destroyed was almost twice as many as in the first half of 1945, reflecting the effects of wartime wear and tear and postponement of retirements.

"While the railroads are carrying fewer ton-miles of freight traffic now than they were a year ago, to do it is taking just about as many cars, and more in some classes of equipment. The average load per car is less than a year ago, the average haul is shorter, and the average turn-around time is longer. One cause of this is that a much greater proportion of box cars is being used for less-than-carload freight this year, partly due to pressure for deliveries which cannot be made in carload lots because of production difficulties. Another cause is the shorter work week in industry, with fewer loading and unloading days, and slower handling of cars.

"At any rate of building possible under the present production difficulties, there will not be enough new cars in the near future to bring freight-car supply up to demand. To get the maximum use out of the available and prospective supply is going to take the best efforts of everybody concerned in loading, moving and unloading cars—and this goes for railroads as well as shippers."

Five-Day Week a Factor—The Pelley-Goodyear appeal of August 5 noted that loadings for the week ended July 20 totaled 921,496 cars, the highest since the week ended October 8, 1941, when 922,884 cars were loaded. It then proceeded to call attention to the more efficient utilization of cars during the 1941 week.

"At that time," it said, "the serviceable car ownership was 1,602,611 (almost 68,000 cars less than now). The turn-around time was 12.2 days per car—exactly one-half day better than it is now. During the week ended October 18, 1941, there were no reports of car shortages, whereas during the week ended July 20, 1946, the reports showed an average daily shortage of 16,091 cars, including 9,818 box cars and 5,576 open tops. Compared with no complaints in 1941, we now have widespread appeals for help in getting cars, and the situation is admittedly serious."

Studies of why this trouble is developing now indicate that the most important cause is the prevailing five-day week in most industries. "Obviously, with railroad operations geared to a 7-day week basis more cars will be required to handle a given tonnage if the shippers and receivers load and unload 5 days per week instead of 6 as previously," the statement explained.

"The problem," Messrs. Pelley and Goodyear continued, "resolves itself into a decision as to what can be done to alleviate the present difficulties from a temporary standpoint. On the railroad side all carriers have been and are being urged to eliminate all possible slack in car handling and all avoidable loss of car days wherever equipment is in possession of the railroad, whether for terminal switching, road haul movement or on repair tracks.

"Shippers and receivers are urged in their own self-interest to step up their unloading operations, and where cars are available for unloading on Saturday and even on Sunday to authorize necessary forces to work. It is also of the utmost importance that receivers keep their places of business open to receive less-than-carload freight six days per week. While such action involves in most instances some additional labor cost, that cost may be considerably less than the cost involved to all when business is lost because cars are not available for loading when required.

"The sympathetic consideration and affirmative action of all users of transportation are required to make this program effective. Suggestions as to any other means by which the present situation may be relieved will be appreciated and given immediate consideration to the end that all possible helpful action may be promptly taken."

I. C. Suburban Electrification Completes Twentieth Year

Twenty years of Illinois Central electric suburban train operation in the Chicago area was completed on August 7, when 471 regular trains carried approximately 175,000 commuters. The road has announced that in the 20 years since the electrified service was placed in operation, it had carried 750,804,130 suburban passengers and had run 3,232,804 trains, over 131 miles of track used exclusively by suburban trains, and servicing 54 stations.

Short Lines Meeting

Chairman George M. Barnard of the Interstate Commerce Commission will be among the speakers at the thirty-third annual meeting of the American Short Line Railroad Association, which will be held at the Morrison Hotel, Chicago, October 2 and 3. The program for the meeting was set out in an August 5 circular from President J. M. Hood.

Mr. Barnard will speak at the October 3 luncheon session, while speakers at other sessions will include Frank Squire, member of the Railroad Retirement Board; Frank P. Douglass, chairman of the National Mediation Board; and W. H. Dana, chairman of the Western Traffic Executive Committee. Mr. Hood also announced that Fairbanks, Morse & Co. has invited those attending the meeting to visit its Diesel locomotive plant at Beloit, Wisc., on October 4, when "road and switching locomotives wil be exhibited and shown under construction."

New York Commuter Trains in Collisions

Two collisions involving commuter trains in the New York area occurred within a period of less than 24 hours last week. The first, about 5:28 p.m. on August 2, was a rear-end collision between two trains of the Central of New Jersey at West Eighth street, Bayonne, N. J. The engineer of the following train has been charged with manslaughter by local authorities after a preliminary investigation led them to the conclusion that he ran past a stop signal. The accident caused the death of one employee and the injury of 75 or more passengers and employees.

The second accident occurred about 11:35 a.m. on August 3 near the Port Washington, N. Y., station of the Long Island, on the electrified branch terminating at that point. It was a head-on collision between a multiple-unit electric train and a freight engine, and resulted in the death of two employees and the injury of some 25 other persons. The conductor of the passenger train, who was killed in the accident, reportedly failed to obtain clearance for it before leaving Port Washington.

Freight Car Loadings

Loadings of revenue freight for the week ended August 3 totaled 898,395 cars, the Association of American Railroads announced on August 8. This was a decrease of 12,118 cars, or 1.3 per cent, below the preceding week, an increase of 34,485 cars, or 4.0 per cent above the corresponding week last year, and an increase of 8,801 cars, or 1.0 per cent, above the comparable 1944 week.

Loading of revenue freight for the week ended July 27 totaled 910,513 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, July 27

District	1946	1945	1944
Eastern	169,284	164,214	165,610
Allegheny	191,327	197,214	200,279
Pocahontas	66,803	54,777	56,859
Southern	134,200	122,469	124,154
Northwestern	137,991	131,315	141,705
Central Western	143,124	142,392	144,018
Southwestern	67,784	74,049	76,865
Total Western Districts	348,899	347,756	362,588
Total All Roads	910,513	886,430	909,490
Commodities:			
Grain and grain products	59,121	67,849	57,408
Livestock	17,957	14,353	14,878
Coal	188,293	173,197	179,539
Coke	13,827	14,316	14,830
Forest products	51,600	46,213	53,112
Ore	72,322	76,258	85,173
Merchandise l.c.l.	121,227	103,557	103,845
Miscellaneous	386,166	390,687	400,705
July 27	910,513	886,430	909,490
July 20	921,496	882,648	902,092
July 13	895,080	883,543	903,901
July 6	679,785	726,663	744,347
June 29	879,545	893,947	897,210
Cumulative total, 30 weeks	22,422,963	24,657,830	24,745,031

In Canada.—Car loadings for the week ended July 27 totaled 70,259 cars, as compared with 68,221 cars for the previous week, and 73,442 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

Totals for Canada:	Revenue Cars Loaded	Total Cars Rec'd from Connections
July 27, 1946	70,259	34,728
July 28, 1945	73,442	34,634
Cumulative Totals for Canada:		
July 27, 1946	2,001,701	1,013,104
July 28, 1945	2,053,286	1,100,592

Journal Box Lids

In a circular letter dated July 16, the secretary of the A. A. R., Mechanical Division, calls attention to revised Specification M-120, Journal Box Lids, which has been approved by letter ballot, after careful preparation by a subcommittee looking toward the eventual adoption of a standard A. A. R. journal-box lid, combining the best features of lids now avail-

able, in cooperation with the manufacturers, who will be given an opportunity to submit their lids for approval in accordance with Sec. 6.

The letter states that, pending formal committee approval of lids now on the market, and to facilitate the progress of this program, car owners are urged to purchase only lids complying with the intent of the revised specification in order that service experience may be rapidly accumulated. Owners will be advised from time to time as to approved lids whose manufacturers have been authorized to apply the A. A. R. approval stamp.

It is also emphasized in the letter that satisfactory closure of the journal box, even with an approved lid, cannot be accomplished unless the journal-box face, hinge lug, and hinge-pin hole are in proper relation and condition, and unless a suitable hinge pin is applied. Experience in regard to the force required to open the lid, Sec. 4 i, is especially desirable, bearing in mind that the figures of 40 lb. minimum and 50 lb. maximum are based on a journal box having all parts in standard condition, and that with worn parts the force required, even with a new lid, will be considerably less.

On the other hand, if a new lid is applied to a box having oversize or improperly located hinge lugs, the force required may be more than the maximum specified. For this reason, the letter requests that owners exercise close control over the dimensions of new journal boxes, and also institute reclamation methods which will restore badly worn box details to proper dimensions.

Santa Fe Freight Plane Makes First Flight to Chicago

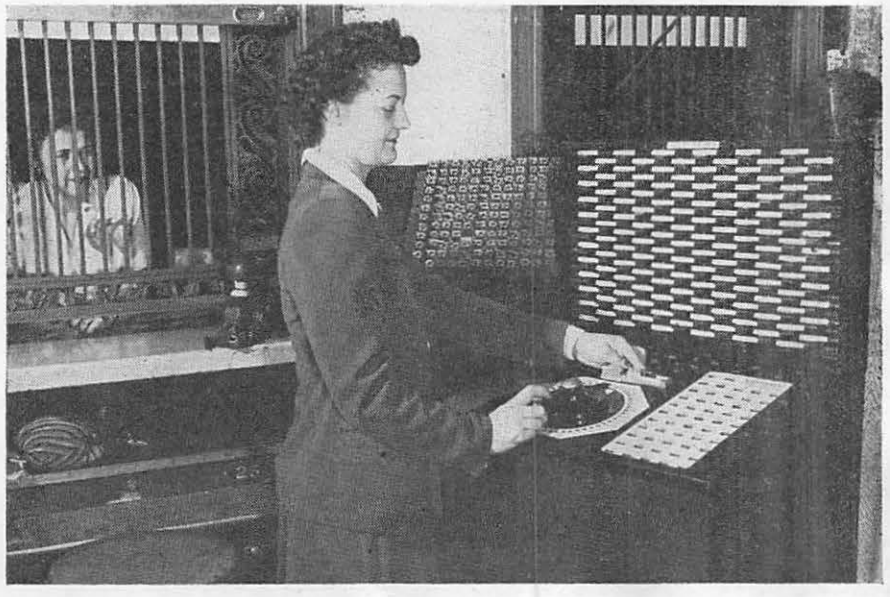
Carrying a record load of perishables in its specially-constructed refrigerating unit, the first plane of Santa Fe Skyway, Inc. (a new contract air cargo affiliate of the Atchison, Topeka & Santa Fe) recently completed a successful flight from Los Angeles, Cal., to Chicago. The refrigerated plane, a war-surplus Douglas C-47, took off from the Los Angeles Municipal Airport at 11 a.m., on July 31, for Salinas, Cal., where the cargo of fruits, melons and fish was stowed aboard. Refueling stops were made at Winslow, Ariz., Amarillo, Tex., and Kansas City, Mo., and the plane arrived in Chicago at 3:10 a.m., the following day.

The company, with headquarters at Chicago, will carry specialized types of cargo, including perishables and large loads of merchandise, in the territory served by the railroad between Chicago and the West coast. No schedule will be issued, and all shipments will be on a contract basis. No passenger service will be offered.

Ticket Machines on Trial in New York Stations

Tests of ticket issuing machines previously described in *Railway Age* are under way in both Grand Central terminal and Pennsylvania station, New York, in connection with experiments in the use of these machines under varying conditions on different railroads. The New York Central has installed a General Register Corporation Automaticket machine in its upper level ticket office at Grand Central, while the Long Island has placed two National Cash Register machines in its ticket office in Pennsylvania station. Coach tickets are issued by each type of machine.

The Long Island's machines, each weighing about 155 lb., are operated by nine code keys and a selector, enabling the operator to stamp a ticket with any of 100 destinations, 40 keys for computing and indicating the price and tax, and a button for repeat sales. Tickets for the 10 most used stations can be produced with the fewest manual motions. The ticket is somewhat similar in appearance to a regular cash register receipt.



Above—One of the Long Island's two automatic ticket printing-issuing machines installed in the Long Island concourse at Pennsylvania station, New York. Below—The automatic printing and issuing machine which the New York Central has placed at a ticket window in the upper level of Grand Central terminal

The New York Central's machine has a dial for the selection of any of the 50 most frequent destinations, while type matrices in a rack above the dial are available for insertion by the operator, for an additional 200 less used stations. The tickets are printed on regular yellow card stock, showing the fare and tax, as well as starting point and destination.

Loomis Would Try Compulsory Arbitration in Strikes

Daniel P. Loomis, executive director of the Association of Western Railways, addressing a meeting at Madison, Wis., on July 31, voiced the belief that compulsory arbitration should be the next means to be tried in settling railroad labor-management

Roadmasters and B. & B. Men Set for Chicago Meeting

Deviating from their long-standing practice of pre-war years, in which the two associations have held independent annual conventions in the fall, the Roadmasters' and Maintenance of Way Association and the American Railway Bridge and Building Association will hold concurrent annual conventions this year at the Hotel Stevens, Chicago, September 17-19. Both associations have arranged strong, independent programs, with numerous technical addresses and reports, but several of the sessions will be joined to hear addresses of common interest to both groups.

Strengthening interest in the simultaneous conventions this year, which will enable maintenance of way and structures officers to attend selected sessions of both groups, is the large exhibit of materials and equipment being planned in conjunction with the convention jointly by the Track Supply Association and the Bridge and Building Supply Men's Association. For this exhibit, which will open at noon on September 16, the day before the opening of the convention, 83 companies have already arranged for exhibit space, as follows:

Air Reduction Sales Company
American Fork & Hoe Co.
American Lumber & Treating Co.
Armco Drainage & Metal Products, Inc.
Austin-Western Road Machinery Company
Barco Manufacturing Company
Bernuth, Lembcke Company, Inc.
The Buda Company
Cartier Supply Company
Chicago Pneumatic Tool Company
Chicago Steel Foundry Company
Chipman Chemical Company, Inc.
Crerar, Adams & Co.
Cullen-Friestedt Company
Dearborn Chemical Company
A. P. DeSanno & Son, Inc.
The Duff-Norton Manufacturing Company
Electric Tamper & Equipment Co.
Eutectic Welding Alloys Company
Evans Products Company
Fabreeka Products Company
Fairmont Railway Motors, Inc.
Hayes Track Appliance Company
Homelite Corporation
Hubbard & Co.
Illinois Malleable Iron Company
Independent Pneumatic Tool Company
Ingersoll-Rand Company
Johns-Manville Sales Corporation
O. F. Jordan Company
Kaiser, E. B. Company
Kalamazoo Manufacturing Company
The Kershaw Company
Koehring Company
The Lehon Company
The LeRoi Company
Le Tourneau Company
Link-Belt Speeder Corporation
The Lundie Engineering Corporation
Maintenance Equipment Company
Mall Tool Company
Marvel Equipment Manufacturers, Inc.
Massey Concrete Products Company
Master Builders Company
Mississippi Supply Company
Morden Frog & Crossing Works
Morrison Railway Supply Corporation
Murdock Manufacturing Company
Nordberg Manufacturing Company
Northwestern Motor Company
The Oliver Corporation
Oliver Iron & Steel Corp.
Onan, D. W. & Sons
Overhead Door Company
The Oxweld Railroad Service Company
The P. & M. Co.
Pettibone Mulliken Corporation
Pittsburgh Pipe Cleaner Company
Pocket List of Railroad Officials
Power Ballaster Company
The Q. and C. Company
Racine Tool & Machine Co.
The Rail Joint Company, Inc.
The Rails Company
Railway Engineering & Maintenance
Railway Maintenance Corporation
Railway Purchases & Stores
Railway Track Work Company
Ramapo Ajax Division of The American Brake Shoe Company
Reade Manufacturing Company, Inc.
Rust-Oleum Corporation
Snap-On Tools, Inc.
Sperry Products, Inc.
Syntron Company
Taylor-Colquitt Company
Templeton, Kenly & Co.
Timber Engineering Company
Union Metal Manufacturing Company
Warren Tool Company
Woodings-Verona Tool Works
Woolery Machine Company
Worthington Mower Company
Worthington Pump & Machinery Corp.

Inquiries concerning the exhibit should be directed to Lewis Thomas, secretary of the Track Supply Association, 59 E. Van Buren street, Chicago, who is acting as director of exhibits.

disputes. Mr. Loomis made his suggestion while addressing the third session of the school of banking sponsored by the Central States Conference at the University of Wisconsin.

"We have tried everything but compulsory arbitration, and maybe it is time to try it," the speaker told his audience. Mr. Loomis then reviewed the long history of railroad labor legislation and disagreements, and declared the present labor law is basically the same as the original railway labor legislation enacted in 1888, adding that "after 50 years of experimentation the only real significant change is that, under the present act, an award of arbitration may be enforced in court, whereas, under the 1888 act, awards had no sanction other than the force of public opinion."

Mr. Loomis took issue with criticisms of the Railway Labor Act because of its slow processes and allegations that it hampered the working man. He said in conclusion: "It seems to me that men are definitely better off under the processes of the Railway Labor Act, but to make these processes work they must be abided by and cannot be continually flouted."

I. C. C. Told Crosser Act Will Cost $85 Million a Year

Making the submission a part of the railroad presentation in the Ex Parte 162 rate-advance case, J. Carter Fort, vice-president and general counsel of the Association of American Railroads, has advised the Interstate Commerce Commission that payroll taxes levied on the carriers will be increased $85,000,000 next year as a result of the Crosser act embodying the Railway Labor Executives Association program for liberalizing the Railroad Retirement and Railroad Unemployment Insurance systems. Mr. Fort is chief counsel for the carriers in the rate case, and his advice to the commission was embodied in an August 1 letter to Chairman Barnard.

"I am," he wrote, "taking this means of calling to your attention an important development, of which the commission will take judicial notice. It occurred subsequent to the conclusion of the presentation of the railroads' evidence in chief at the Chicago hearings.

"H. R. 1362, having been passed by Congress, was approved yesterday by the President and became law. This statute places a payroll tax on the railroads for the purpose of supporting the railroad retirement system, of 5¾ per cent for the years 1947 and 1948; 6 per cent for the years 1949 through 1951; and 6¼ per cent for the following years. In other words, it increases the taxes of the railroads for retirement purposes by 2¼ per cent of payroll for the years 1947 through 1951, and by 2½ per cent of payroll thereafter.

"On the basis of the present payroll, the increase in payroll taxes to be paid by the railroads will be approximately $85,000,000 for the year 1947. This addition to the payroll tax will increase by a like amount the needs of the railroads for additional revenues to be obtained from their freight rates."

Long Island Trainmen Set Strike

Long Island trainmen who are members of District 50 of the United Mine Workers have voted to strike, but are understood to be agreeable to a postponement of such action pending consideration of their case by an "emergency board." The basis for the strike is a demand for rules changes. As District 50 was not a party to the general wage negotiations which were concluded with the general increase of 18½ cents per hour at the time of the two-day strike in May, its members have declined to accept the terms of that settlement, which included a postponement of consideration of demands for rules changes.

"Pere Marquette" Makes Trial Grand Rapids-Detroit Run

The career of the Pere Marquette's two new "Pere Marquette" streamliners was officially launched on August 6 when one of the trains made its first preinaugural run from Grand Rapids, Mich., to Detroit carrying guests and railroad officers headed by R. J. Bowman, president of the C. & O. and the Pere Marquette.

Following arrival in Detroit's Fort street station, the train was formally christened, and officers of the Pullman-Standard Car Manufacturing Company, manufacturer of the cars, and executives of the Electro-Motive division of General Motors, maker of the Diesel-electric locomotives which will pull them, presented the train to officers of the two roads who, in turn, accepted the equipment.

G. N. Logs Don't Go to Tacoma —A Correction

An erroneous caption accompanying an illustration on page 47 of *Railway Age* of July 12 indicated that log trains there shown in Tacoma, Wash., freight yards had arrived there via the Great Northern. Tacoma is, of course, a Northern Pacific terminal, and that road derives a substantial part of its revenues from the transportation of forest products.

With the Government Agencies

Rates on Iron Ore Called Excessive

Other shippers also testify at final Chicago hearings in Ex Parte 148 and 162

The Chicago hearings before the Interstate Commerce Commission in the railways' petition for a general increase in freight rates and for a continuation of the present level of passenger fares, Ex Parte Nos. 148 and 162, were concluded during the week of July 29.

At the initial session, James E. Hadon, representing the Eastern-Central Motor Carriers Association, said that as of June 30, 1946, truckload rates in that region were 11.4 per cent above rail rates and l.t.l. rates were 12½ per cent above. As of July 1, 1946, after the railways had increased their rates as authorized by the commission in its June 20 decision, truck rates stood at 11.24 per cent above rail on truckloads and 11.3 per cent above rail rates on l.t.l. These comparisons to apply on the class rate level.

Truckers in Same Boat—He asserted that the motor carriers, too, are faced with constantly increasing costs and are now considering new demands by labor. The operating ratio of 31 of these carriers represented by him, which hauled 90 per cent of the traffic in this territory in 1945, was 100.7, he said. For the 15-month period ending March 31, 1946, that ratio was 100.8. As a result these motor carriers are now publishing a general rate increase of 20 cents per 100 lb. above the present rail rates on l.t.l. shipments under 5,000 lb., and of 6 per cent above that level on all other traffic. He asked the commission to "give attention to the matter of different treatment on l.c.l. (rail) freight than on rail freight as a whole," and repeated the truckers' argument that the present level of rail l.c.l. rates was not paying a profit to the rail carriers.

T. C. Maurer, traffic manager for a group of Florida producers of phosphatic sand and clay, opposed the carriers proposal for a 25 per cent increase in rates on these commodities and asked the commission to confine such increases to those granted on other low-grade commodities, such as clay and ground limestone, on which flat increases of 20 cents per ton are proposed. He also asked the commission to so word its order that the increase will apply only once where the movement is made on combination rates, to prevent the rates being subject to separate increases in each local rate, or other factor, in the combination.

At the main hearing on July 31, E. J. Balda, traffic manager of the Wisconsin Woodwork Manufacturers Traffic Association, who also represented millwork manufacturers in Illinois and Iowa, asked the commission to apply the same maximum increase to millwork as it applies to lumber. He declared that the midwestern millwork manufacturers had been subject to gradual discrimination in the matter of rates for a number of years due to the widening spread between the rates on common lumber and the rates on millwork because of the relatively longer hauls on millwork from midwestern plants to eastern and southern points and correspondingly shorter hauls on lumber from the West, as compared with long lumber and short millwork hauls enjoyed by eastern and southern millwork manufacturers.

Farmers' Views—Milo K. Swanton, executive secretary of the Wisconsin Council of Agriculture Cooperatives, said that "in view of rising railway costs, we do not take the position that no increase in freight rates should be granted at this time. We do object to the 25 per cent general increase and we believe, in view of the unstable future facing American agriculture, that the principles of the Hoch-Smith resolution should apply." It was his opinion that increased freight rates bear particularly heavily on the farmer. He asserted that the railroads should give consideration to the fact that modern agriculture produces a "consistent and dependable volume of traffic" and "is certain to demand more, not less, transportation services in the future."

T. C. Maurer, traffic manager of the Jacksonville (Fla.) Traffic Bureau, appearing in behalf of the Southern Traffic League, opposed any increases other than those already granted by the commission in its decision of June 20, and suggested that any further consideration of the case should be deferred until the railways were in a position to furnish statistics showing the actual results of those increases, which did not become effective until July 1.

B. H. Overton, director of the Traffic Bureau, Chamber of Commerce, St. Petersburg, Fla., who also represented the Florida Rate Conference, told the commission that Florida class-rate shippers, when compared to shippers in other areas, paid more for transportation per mile than shippers in the North, and asserted that the percentage increases proposed by the carriers would further increase that disparity. Both Mr. Overton and Mr. Maurer wanted any increases granted applied to the scale ordered by the commission in its 28,300 proceedings instead of to existing rates.

At a supplemental hearing on July 31, before Examiner Burton Fuller, spokesmen for interests in the Missabe and Vermillion iron ranges of Minnesota asserted that any increase in the transportation charges on iron ore will tend to retard the de-

(Continued on page 240)

79th Congress Closes Last Regular Session

Crosser act is principal new railroad legislation; Bulwinkle bill died

Passage of the Crosser bill embodying the Railway Labor Executives Association program for liberalizing the Railroad Retirement and Railroad Unemployment systems was, from the railroads' standpoint, the principal action taken by the seventy-ninth Congress at its 1946 session which was adjourned sine die on August 2. The success of the labor organizations in getting this legislation enacted in virtually the same form that it was originally submitted to Congress marked a major defeat for railroad management.

Another set-back came when the Senate failed to act on the House-approved Bulwinkle bill to stay the operation of anti-trust laws with respect to carrier rate-making procedures and other joint actions approved by the Interstate Commerce Commission. Like all other proposed legislation pending at various stages short of final enactment, this bill died with the session—unless it should be revived by a call of the Congress into special session sometime before the end of the year. It will be a new Congress, the eightieth, which convenes next January, and all proposed legislation will have to make a fresh start.

Forwarders Reprieved—Legislation enacted, in addition to the Crosser bill, included the Wheeler-Reed bill which sets up procedures short of bankruptcy for the readjustment of railroad financial structures, including provisions making such procedures available to some large railroads undergoing reorganization as well as to all roads not yet in the hands of the courts. This bill went through during the latter days of the session, and it had not been acted upon by President Truman when this issue went to press. In the same situation was H. R. 5560 to reduce the domestic rate on air mail from 8 cents per ounce to 5 cents.

Earlier in the session came enactment of the legislation which directs the Interstate Commerce Commission to determine as a matter of permanent policy the terms and conditions under which forwarders may utilize the services and instrumentalities of motor carriers. Meanwhile, the act permits continuance of present joint-rate arrangements between forwarders and truckers. Congress took no final action with respect to the strike-control legislation asked by President Truman at the time of the railroad walkout; but it did enact the so-called Hobbs "anti-racketeer-

(Continued on page 242)

Supervisors Are Only Subordinate Officials

I. C. C. decision brings group, including general roadmasters, under labor act

The Interstate Commerce Commission has affirmed findings of reports wherein its Division 3 had interpreted and amended outstanding commission orders defining the work of railroad employees and subordinate officials to include the work of St. Louis-San Francisco roadmasters and of Union Pacific supervisors, "such as general roadmasters, roadmasters, assistant roadmasters, and general foremen, supervisors of bridges and buildings, such as supervisors, assistant supervisors, and general foremen, supervisors of water supply, supervisors and inspectors of signals such as supervisors, assistant supervisors, and general foremen, and supervisors of telegraph lines." The report on oral argument in Ex Parte No. 72 (Sub-No. 1) has the effect of bringing the employees involved under the provisions of the Railway Labor Act.

The majority decision was accompanied by separate expressions from Commissioner Alldredge, concurring in part, and Commissioner Miller, a dissenter with whom Commissioner Porter agreed. Also, Commissioner Rogers' dissent was noted, while Commissioners Aitchison and Lee did not participate in the disposition of the case.

Unionization Feared—In their unsuccessful effort to have the commission reverse the prior reports' findings, the Frisco and U. P. had the support of the Association of American Railroads, while the Railway Labor Executives Association was on the winning side. Generally the railroads contended that the kind of work done by the employees involved, together with the duties and responsibilities of their positions, warranted classifying them as officials and not as "employees or subordinate officials" under section 1 (fifth) of the Railway Labor Act. The carriers further expressed their fears that if the prior findings were affirmed "outside interests eventually will take over the management of the railroads and create a serious threat to the maintenance of discipline and efficiency of the employees under consideration, and that the latter's loyalty to the company will be impaired if they become unionized."

To this the commission replied that "whether or not these employees join labor unions is not dependent upon our findings herein." In any event, it added, "these are matters which are not cognizable by us in the determination of the issues presented. Our duties under the Railway Labor Act are clear, and questions of public policy have no place in our deliberations here."

Previously the commission had pointed out that the Labor Act contains no definition of a subordinate official, and that the commission itself has never attempted to set "a rigid standard by which, in all instances, the duties and responsibilities of subordinate officials and officials may be distinguished at a glance." It did concede, however, that its original classification order of February 5, 1924, placed some limitation upon the "subordinate officials" class in that it brought in, for example, only those roadmasters "with rank and title not higher than division roadmaster." But the commission has learned that rank and title cannot be considered as controlling—each case "must of necessity be decided upon the record before us, and all pertinent facts considered, even though of themselves some may be deemed trivial."

Authority "Limited"—Proceeding on that basis, the present report found that authority exercised by the supervisors involved was "much limited in scope." Generally speaking, "except in emergencies," they may not hire or discharge employees under them without authority from a superior. But, even if they could, the commission would not have been "prepared at this time to find that the power to employ, discharge, or discipline is the all-distinguishing badge of an official." In its opinion, other things also, including the right kind of clothes, make an officer.

"The employees here considered," the report said, "use motor cars, hand cars, the trains, or walk, and are not supplied with business cars or the so-called 'B-type' car (bus inspection car) usually furnished officials. Many of them in performing their duties labor manually, and much of the time they wear overalls when so engaged. They usually handle their own business correspondence and make their reports without secretarial or stenographic help. They do not as a rule have private offices as is customary with officials. Some of them have expense accounts for such items as lodging, meals, etc., but they are more restricted in their expenditures than are the officials and account more strictly for those expenses than do the officials. . . .

"If the employees under consideration were full-fledged officials their advice would be sought by, and they would confer with, other officials in company matters such as policy-management. According to the records the services and advice of these employees are subordinate to those individuals who have heretofore been regarded as officials. Generally speaking, railroad employees below the grade of division superintendent are considered to be subordinate officials or employees, as the case may be. However, assistant superintendents, train masters, chief train dispatchers under certain circumstances, and others, who at times exercise the authority of a division superintendent, are looked upon as officials."

Minority View—In his concurring-in-part expression, Commissioner Alldredge noted his agreement with the majority except that he thought the U. P. general roadmasters should be classified as officials. Commissioner Miller, in the dissent to which Commissioner Porter subscribed, said that his review of the prior decisions on these and similar proceedings made him feel that the commission has gone "beyond the intent of the Railway Labor Act, in many instances." He thinks the ceilings in the classification orders should be lowered, for those orders "now reach up and embrace many persons who, in my opinion, are part of railroad management."

Mr. Miller also believes that many of

(*Continued on page 240*)

I. C. C. Interprets Car Spotting Tariff

Finds it does not in any way modify or enlarge obligations of carriers

Interpreting the spotting-services tariff which became effective in Official Classification territory last January 1, the Interstate Commerce Commission has ruled that it "in no way modifies or enlarges the carriers' obligations" as previously determined in the terminal services phase (Part II) of the Ex Parte 104 investigation of practices affecting operating revenues and expenses. The interpretation came in the commission's seventy-fourth supplemental report on further hearing in that proceeding, the situation under review being the spotting services performed at the Argo, Ill., plant of the Corn Products Refining Company.

The majority report by Commissioner Patterson affirmed the prior report's finding that the performance by the railroads of switching services beyond specified interchange tracks without compensation in addition to the line-haul rates is in violation of section 6(7) of the Interstate Commerce Act. In reaching this conclusion the commission rejected the industry's contention that the spotting-services tariff, which became effective since the further hearing, created an entirely changed situation that could be appraised only in a new proceeding involving the tariff.

Wide Effect—Indicating some agreement with the industry, Commissioner Splawn, concurring-in-part, said it seemed to him "that a further hearing is necessary to determine in what respect that tariff is lawfully applicable." Commissioner Alldredge, in a dissenting expression, disagreed with the majority's interpretation of the tariff, asserting that such interpretation will render the tariff "inapplicable not only at the particular plant here considered but, by inference, also at all other plants of comparable character in Official territory." Citing the "well-settled legal doctrine that a tariff which has been filed with the commission has the force of a statute," Mr. Alldredge further complained that the spotting tariff "is in effect made unenforceable and ineffectual by the majority decision." Commissioner Mahaffie joined in the Alldredge expression.

The tariff involved is the joint agency tariff (Raasch's I. C. C. 600 and Jones' I. C. C. 4002) wherein the railroads have published rules governing receipt and delivery of carload freight at private sidings and industrial tracks in an undertaking to bring their spotting-service practices into accord with the principles laid down by the commission.

The tariff provides that, with no charge in addition to line-haul rates, cars will be delivered at or removed from privately owned tracks or industrial tracks, the loading and unloading points to be designated by the industry "when that service can be ordinarily performed in continuous movement at the carrier's ordinary operating

(*Continued on page 241*)

Disregard of Signals Held Collision Cause

I. C. C. report of Burlington accident at Naperville also criticizes train consist

"Failure to operate the following train in accordance with signal indications" was found by the Interstate Commerce Commission to have been the cause of the disastrous rear-end collision between two Chicago, Burlington & Quincy passenger trains at Naperville, Ill., on April 25, in which 39 passengers and 6 employees were killed and 48 passengers and 21 employees were injured. The commission held that the presence of several light-weight cars, which it said had less than the minimum buffing strength resistance, between "standard" cars may have contributed in part to the number of casualties which resulted from the collision, and it recommended that "the Chicago, Burlington & Quincy discontinue the operation of passenger train cars which do not meet present standards, intermingled in trains with cars meeting such standards."

According to the report, prepared after an investigation under the supervision of Commissioner Patterson, train No. 11, a westward first-class passenger train, consisting of a two-unit Diesel-electric locomotive, one baggage car, one storage-mail car, two baggage cars, one mail car, one refrigerator-express car, two baggage cars, two coaches, one dining car, one parlor-lounge car and one coach, in the order named, departed from Chicago Union station, 28.44 miles east of Naperville, at 12:35 p.m., and, moving on track No. 2, passed Downer's Grove, the last open office, 7.32 miles east of Naperville, at 12:57 p.m. Soon afterward an object was seen flying from beneath the train, and it was stopped for inspection at Naperville, in response to a communicating signal from the forward trainman, at 1:03 p.m., with the rear end standing 934 ft. beyond (west of) signal 228.1, and 6,551 ft. beyond signal 227.1. About two minutes later No. 11 was struck from the rear by No. 39. The first five cars of No. 11 were of conventional all-steel construction; the sixth car was of steel-underframe construction; the seventh and eighth cars were of conventional all-steel construction; the ninth, tenth and eleventh cars were of light-weight, stainless-steel construction; and the remaining two cars were of conventional all-steel construction.

Damage to Equipment—Train No. 39, consisting of a two-unit Diesel-electric locomotive, three coaches, dining car, two tourist sleeping cars, and three Pullman sleeping cars, in the order named, all of conventional all-steel construction, and of a total weight of 1,034.43 tons, including the locomotive, left Chicago Union station at 12:35 p.m. It passed Downer's Grove on track No. 2 at 1 p.m., two minutes late, passed signal 227.1 which displayed "approach," passed signal 228.1, which displayed "stop-then-proceed," passed the flagman of No. 11; and, while moving at an estimated speed of not less than 45 m.p.h., it collided with No. 11 at a point 934 ft. west of signal 228.1.

The ninth car of No. 11 was derailed and leaned to the south at an angle of 15 deg., but remained in line with track No. 2. The center-sill was twisted and the roof sheets and the end sheets were somewhat damaged. The tenth car was thrown on its left side south of track No. 2 and at an angle of 15 deg. to it. Both ends were buckled, the center-sill and cross members were bent, both draft gears were broken and both trucks were damaged. The eleventh car was turned around, bent into an U-shape, and stopped north of the tenth car and against it. It was demolished about three-fourths of its length. The twelfth car was derailed across track No. 1 and stopped with its front end about 10 ft. west of the tenth car and leaned to the north at an angle of 25 deg. Both draft gears were broken, and both trucks were badly damaged.

The front unit of the locomotive of No. 39 entered the rear car of No. 11 above the floor line and demolished the superstructure of this car about three-fourths of its length. This car remained upright on track 2, and at the rear of the eleventh and twelfth cars. The center sill at the rear end was bent downward about 18 in.; the bend extended to the rear bolster. Both units of the locomotive of No. 39 were derailed but remained upright and in line with track No. 2. The front unit stopped inside the rear car of No. 11 at a point 205 ft. west of the point of collision. The front truck was torn off and stopped 180 ft. west of the point of collision. The frames, the trucks and the electrical and air equipment of both units were badly damaged. The first to fourth cars, inclusive, and the rear truck of the fifth car of No. 39 were derailed, but remained upright and in line with the track. The rear end of the second car telescoped the front end of the third car about 6 ft., but otherwise the derailed cars of No. 39 were not extensively damaged.

Brake Equipment—The Diesel-electric locomotive of No. 39 was provided with M-40-A brake equipment, and included a safety-control feature so arranged that when there is no pressure exerted on either the foot pedal or the automatic brake-valve handle, the train brakes would apply in emergency unless a brake application of 30-lb. brake-cylinder pressure had been made. To apply the train-brake system in emergency by manual operation, the brake-valve handle must be moved to the extreme right. The equipment was so arranged that during an emergency operation of the brakes, sand was automatically deposited on the rails. The regulating devices were adjusted for brake-pipe pressure of 110 lb., and main reservoir pressure of 140 lb. Four of the cars of No. 39 were equipped with UC-12-B control valves, and five with LN-3 control valves. Both units of the locomotive and five of the cars were equipped with clasp brakes. The other cars were equipped with one brake shoe for each wheel.

After the accident, tests of the air-brake equipment of No. 39 disclosed that the automatic brake valve and all control valves of the units involved functioned as intended,

(*Continued on page 244*)

Sen. Taylor's Blasts Refuted by Railroads

Carriers declare they did not overcharge government on wartime freight

The Association of American Railroads this week vigorously denied charges made by Senator Glen H. Taylor, Idaho Democrat, that the railroads overcharged the government on wartime freight and that "the 'rate committee' of the Army Transportation Corps was composed largely of officials of the carriers, who, for the duration of the conflict, wore the uniform of the Army and Navy, to negotiate rates with their former and future employers." Senator Taylor's allegations and demand for a congressional probe into the wartime practices of the railroads were contained in letters addressed last week to Senator Mead, New York Democrat, who is chairman of the Senate war investigating committee, and to James E. Webb, director of the Bureau of the Budget.

In his August 2 letter to Senator Mead, Senator Taylor referred to the October, 1945, report to the director of the Bureau of the Budget "on the freight rates paid by the War Department on the transportation of war material during World War II." Senator Taylor said the report described the "long history of overcharges," and found that the government "has paid and is paying many millions of dollars in excessive payments for the transportation of material and supplies of the War Department."

"Still Paying"—"It also charges that there has never been any organization within the War Department adequately equipped, staffed or empowered to negotiate with the carriers for necessary revisions of rates, charges, rules and regulations," he continued. "It further charges that the War Department has not given any of its officials necessary authority to institute appropriate action before the Interstate Commerce Commission. The report concludes 'that the government has not only paid excessive charges in a stupendous amount before and since Pearl Harbor but is still paying such excessive charges on presently moving traffic and will continue to pay them until appropriate action is taken to remedy the situation.'"

Senator Taylor noted further that after issuance of the report Attorney General Tom Clark informed the bureau that the I. C. C. may entertain complaints of the government and award reparations with respect to rates which the government negotiates with carriers under section 22 of the Interstate Commerce Act. The attorney general's opinion, noted in the *Railway Age* of June 22, page 1235, was requested by Harold D. Smith, former director of the bureau, the above-mentioned investigation into transportation charges paid by the War Department having been conducted by a special committee named by Mr. Smith after the matter had been called to his attention by Chairman Wheeler of the Senate committee on interstate commerce. (See *Railway Age*, February 9, page 333.)

Mr. Taylor also recalled that the attorney general had offered to institute legal

proceedings whenever the Budget Bureau desired that action. "Up to the present time, however," he complained, "no such advice has been forthcoming from the Budget Bureau, in spite of the fact that more than two months have elapsed.

"These depredations on the national treasury are all the more offensive when one recalls that during the war the railroad carriers inserted large advertisements in newspapers and magazines, telling the public what an unselfish, patriotic and brilliant job they were doing. One of those ads actually consisted of a picture of a combat medal, with the brazen assertion that the railroads deserved such a decoration. The carriers passed the cost of this 'Love that Railroad' campaign on to the American people through tax deductions and increases in the rate base. Throughout the war, too, the railroads enjoyed a special exemption from the anti-trust laws under War Production Board Certificate No. 44, which, ironically enough, was issued under the authority of Section 12 of the Small Business Act."

Everybody Else Above Reproach—Senator Taylor charged that the nation's large corporations, "aided by their friends in the Army and Navy," were able to subvert the Administration's efforts to impose a policy of equality of sacrifice. He insisted that the same corporations used the war situation as an opportunity to make "unprecedented profits" while workers were frozen in their jobs and salary rates.

"The railroad carriers, behind an unctuous facade of self-righteousness, have been among the outstanding offenders," he told Senator Mead. "The case against them already rests in the files of the Budget Bureau and other government agencies. It involves high officers of the Army and Navy. Your investigation will serve a valuable purpose, because it will make possible civil suits to recover over payments, anti-trust suits to end monopolistic practices, and criminal trials of the grosser offenders."

Referring again to the October, 1945, report to the Bureau of the Budget and the subsequent opinion of Attorney General Clark, Senator Taylor, in his letter to Director Webb on August 1, declared that "the only conclusion which the public can draw from your predecessor's failure to reply to this letter from the attorney general is that the Budget Bureau has receded from its position and no longer is interested in the government's recovery of these funds."

"It will be hard for the American people to accept a decision not to prosecute this case. . . . All of these circumstances indicate the need for immediate action to recover the overcharges which have been paid by the U. S. government to the various railroads," he said. "I hope that you will advise the attorney general of your position in this matter as soon as possible, so that he may take immediate action to recover these overuayments."

Flat Denial—The first of two replies from the carriers to Senator Taylor's declarations came on August 5 in the form of a statement issued by the A. A. R. which asserted that "what the Senator says is not in accordance with the facts."

"In the first place, the railroads did not overcharge the government on wartime freight," the statement went on. "As Brigadier General W. J. Williamson, chief of the Traffic Control Division, Army Transportation Corps, reported to the committee on appropriations of the House of Representatives, 'the railroads made numerous voluntary readjustments of rates with the result that the government received in most instances rates as low as, or lower than, would be prescribed by the Interstate Commerce Commission on the same commodities. These readjustments have materially reduced the over-all cost of the conduct of the war.'"

The A. A. R. release pointed out that during the war the railroad issued "hundreds of voluntary quotations of reductions for the government," many of which, it said, extended over the whole United States and covered tons of thousands of rates each, resulting in savings to the government on millions of shipments.

The statement again quoted General Williamson's testimony in which he stated that "the Traffic Control Division and the carriers . . . have not always agreed on the fair and reasonable rate" but "differences between us have always been satisfactorily resolved and at no time have the carriers ever failed to do that which is clearly in the militant interest, nor to adapt their rates and operations quickly to cover the peculiar commodity and freight or passenger movements incidental to total war."

Army's Own Men Handled Rates—"Another major error in Senator Taylor's letters, as published, is the allegation that railroad men in uniform were responsible for what he termed a lack of zeal in dealing with the railroads for the government," the A. A. R. continued. "Neither the chief of the Army Transportation Corps, nor any other officer in responsible control of matters having to do with railroad freight rates in the United States, went from a railroad to the government service, or has any come from Army service to a railroad. There were many capable railroad men in the Army but they were not the men who had the authority to decide railroad rate questions for the Army. Most of these responsible men were officers of the regular Army. . . ."

The A. A. R. statement conceded that the officer responsible for rate decisions in the Navy Department was a railroad man, but noted that he had been a reserve officer long before the war, and was advanced to the post which he held "by reason of his experience and ability." In none of the other heavy shipping agencies of the government, the A. A. R. added, "were there men controlling traffic and deciding on rates who had come to their positions from railroads, or who have since taken employment with railroads, so far as we are advised."

Replying on August 6 to the A. A. R. statement, Senator Taylor declared that "the denial of my charges to the Mead committee . . . is deceptive and incorrect," adding that "all rate adjustments in the Army were handled by the Standing Rate Committee of the War Department" and that "no officer or employee of the War Department could suggest a rate reduction to a carrier without first clearing his proposal with three of the five members of that committee."

Army's Rate Committee—"A War Department memorandum dated October 5, 1944, shows the composition of that committee." Senator Taylor said. "Its five members were: Major Gordon R. Lyman, who before the war was chief clerk to J. A. Farmer, who was the western member of the top railroad committee making the rate proposals to the government. Lyman has since gone back to the Western Trunk Lines Committee, an organization which is a defendant in an anti-trust suit. Major H. M. Heimbaugh, who left the Rock Island Lines as a clerk but recently returned as assistant general freight agent. Major H. J. Carr, who came to the Army from the M-K-T Lines and has recently returned to that company. Major H. H. Johnson, who came to the Army as chief clerk of the Western Railways Classification Committee, where he worked since 1924. After his release from the Army. he returned as a member of the committee, a substantial promotion. The committee is another defendant in the anti-trust suit which the Department of Justice is bringing against the railroad monopoly. Major James Sloss was the only non-railroad man on the committee. He came to the Army from Sears-Roebuck. Under the rules of the committee, proposals did not have to be submitted to him since three of the five were sufficient to approve any proposal."

Senator Taylor asserted that Captain F. Clifton Toal, who, he said, "came from the Southern Railway and returned to the Southern Railway at a substantial promotion" was "the man who made the rate adjustments for the Navy." He added that the lawyer "who prosecuted Navy rate cases before the Interstate Commerce Commission was Robert H. Bierma, who has since been appointed assistant general solicitor of the Pennsylvania Railroad." The legislator added that Mr. Bierma formerly served as "commerce counsel of the Chicago, Burlington & Quincy."

"The railroad lobby makes the assertion that 'in the first place. the railroads did not overcharge the government on wartime freight,'" Senator Taylor commented. "It is nice to have their word for it. I prefer, however, to rely upon the . . . Budget Bureau report which was issued on October 20, 1945. This report has never been refuted and the attorney general has stated that he is willing to use it as basis for civil suits and criminal prosecution if the Budget Bureau gives him the go-ahead. The Traffic Control Division of the War Department issued a general denial to the report. This denial, however, was written by two officers who have since returned to railroad service. They are Major Heimbaugh . . . and Captain Clyde W. Diffes, who has since been appointed commerce counsel of the St. Louis-Southwestern Railway Lines."

A. A. R. "No Galahad"—"The Association of American Railroads, which has undertaken the role of the white knight on the iron horse does not enter the fray as a spotless Galahad," he concluded. "It did more than any other organization to keep freight rates on government shipments pegged at high levels. It adopted a secret resolution . . . which forbade individual members to give rate reductions to the

government unless they were made in concert with other carriers, and with the permission of the railroad combination. Competition was then destroyed in violation of the anti-trust suits.

"The war situation, with thousands of new defense plants . . . and desolate spots like Oak Ridge suddenly becoming major freight centers caused a need for constant rate changes and renegotiations. The government obviously could not be expected to pay the 'paper rates' to Oak Ridge which were listed for that spot when it was an obscure 'whistle stop.' As a result, thousands of reductions from 'paper rates' were being constantly made, but the rates which were agreed upon were far in excess of the rates which would have been fixed if the railroads were dealing with private companies, according to the Budget Bureau report.."

The next phase of the "debate" also occurred on August 6, when the A. A. R., issuing its second statement in as many days, proclaimed that "Senator Taylor's second statement in which he names certain railroad men as those who 'had power to make decisions' as to railroad rates charged the Army is as inaccurate as his first."

"The capable railroad men whom he names were members of the committee which served on the staff of Colonel Harold R. Hendricks, chief, Freight Branch Traffic Control Division of the Army Transportation Corp," the statement said, adding that "the utmost authority of the committee was to make recommendations to Colonel Hendricks, who was not a railroad man."

Going Through Channels—"Colonel Hendricks reported to Colonel Paul M. Neigh, technical assistant, Traffic Control Division, who also was not a railroad man," the A. A. R. pointed out. "Colonel Neigh was subordinate to the deputy chief, Traffic Control Division. The deputy chief was subordinate to Brigadier General W. J. Williamson, chief of the Traffic Control Division, who in civil life had been general traffic manager of a large shipper. General Williamson, in turn, was subordinate to the chief of the Army Transportation Corps. In other words, the 'decisions' which the committee referred to had power to make were no more than recommendations which were subject to review on five additional levels in the Army Transportation Corps." The A. A. R. admitted again that the officer responsible for rates in the Navy was a railroad man—as Senator Taylor had charged—adding that "the value of his services was such that he was promoted . . . to captain."

The association said that Senator Taylor was in error in his statement that the A. A. R. "did more than any other organization to keep freight rates on government shipments pegged at high levels." Declaring that government shipments were "not so pegged," the A. A. R. said that "reductions in rates for the government numbered in the tens of thousands, and the rates so reduced were not, as Senator Taylor alleges 'paper rates,' but were going rates on which commercial traffic moved."

The A. A. R. said that at the request of several departments of the government, a special committee of traffic officers representing the railroads was set up in Washington to expedite the disposition of the "numerous requests" for rate reductions and other changes to meet the needs of war traffic. It added that an officer of the A. A. R. acted as ex officio chairman of the committee, with no power to vote, his sole function being to channel government requests expeditiously and to issue the reduced rate quotations, when authorized to do so by the individual railroads concerned or by the special committee set up to avoid the necessity of the government agencies' having to deal with railroad organizations in various parts of the nation in order to secure action on their requests.

"Senator Taylor quotes a Budget Bureau report . . . as saying that the rates made for the government were far in excess of rates which would have been fixed if the railroads were dealing with private companies," the A. A. R. statement concluded. "This report has never been made public and we have not been privileged to see it. However, if it says what Mr. Taylor says it says, the report is in error. The rates which were reduced were in fact those which the railroad companies were actually charging shippers. . . ."

Women Railway Employees

Class I railways had 85,372 women employees as of the middle of April, 1946, a decrease of 12,812 from the mid-January, 1946, figure of 98,184, and the proportion of women employees to total employees fell from 7.05 per cent to 6.34 per cent, according to the latest report on the subject by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

The total of 85,372 women employees as of the middle of April compares with an April, 1945, figure of 115,876. The totals of all employees at the same times were 1,345,926 and 1,420,511, respectively.

As compared with mid-January, 1946, there were declines in the mid-April figures for women employees in practically every employment group. The largest number continues to be included in the professional, clerical and general category, for which the mid-April total was 64,663, as compared to mid-January's 71,171. There were 10,424 women employed in maintenance of equipment and stores as compared to 14,674 in mid-January; 9,895 as compared to 11,441 in transportation work, other than train, engine and yard service; and 340 as compared to 773 in maintenance of way and structures.

Other women employees of mid-April included 19 in the executives, officials and staff assistants group; 26 switchtenders and 5 in train and engine service.

Positions Open on I. C. C. Staff

Examinations have been announced by the United States Civil Service Commission for transportation tariff examiner (freight), inspector of safety appliances, inspector of hours of service and inspector of railway signaling and train control. All of these positions are with the Interstate Commerce Commission. Probational appointments, leading to permanent status, will be made from the examinations.

The tariff examiner positions, which pay $3,397 a year, are located in Washington, D. C. Applicants for this examination must have had at least 4 years of appropriate experience dealing with interstate freight rate tariffs. The inspector positions are located in cities throughout the country. The salary is $4,902 a year. Applicants must have had at least 8 years of appropriate experience with railroads operating as common carriers. Types of qualifying experience are described in the examination announcements.

Written tests will be given in connection with all of the examinations. The age limits for tariff examiner positions are 18 to 62 years and for inspector positions, 28 to 53 years. The age limits will be waived for veterans. Copies of the examination announcements may be secured at first- and second-class post offices. Applications must be received not later than September 9.

Emergency Board Reports on Telegrapher Dispute

A National Railway Labor Panel emergency board has recommended that the Chicago, Indianapolis & Louisville, the Lehigh Valley, the Delaware & Hudson, the Delaware, Lackawanna & Western, and the Norfolk Southern settle their dispute with the Order of Railroad Telegraphers by accepting a working rule providing that telegrapher personnel shall be allowed one regularly-assigned rest day per week and shall be paid at time-and-one-half rates if called upon to work on that day. The recommended rule is the same as that accepted by the railroads generally under the terms of a mediation agreement reached with the O. R. T. on July 13, 1945.

Members of Pullman Board

President Truman on August 2 announced appointments to the emergency board which he created on July 27 to investigate the dispute between the Pullman Company and its conductors as represented by the Order of Railway Conductors. The appointees are Dr. I. L. Sharfman of the University of Michigan; Dr. Walton Hamilton, professor of public law, Yale University Law School; and Judge Robert G. Simmons of the Nebraska Supreme Court. The dispute involves the application of the recent wage increase, and the emergency board was created after the O. R. C. had called a strike for August 7.

Proper Loading Will Cut Loss on Fruits and Vegetables

An article on "Reduction of Loss and Damage in Rail Transportation of Fresh Fruits and Vegetables by Improved Loading Methods" is given lead position in the July issue of "The Marketing and Transportation Situation," published by the Bureau of Agricultural Economics of the Department of Agriculture. The author is P. L. Breakiron, transportation economist, and the summary of his findings is as follows:

"Much of the damage that normally occurs during transportation of fresh fruits and vegetables by rail can be prevented by

proper preparation of the load prior to shipment. Only a few of the more efficient methods of loading and bracing involve greater initial expense for the shipper than do the less efficient methods. Those more efficient methods, which do require a greater initial outlay, usually prove profitable to the shipper.

"Important technical advancements in rail transportation of perishables, such as modernized refrigerator cars, faster freight schedules and other innovations, can be expected in the near future. However, these improvements alone will eliminate but part of the loss and damage now involved in rail transportation of perishables. An even larger reduction in these losses can be achieved through use of improved methods of loading and bracing fresh fruit and vegetable shipments. Continued use of inefficient methods will help to prolong the present high cost of marketing these products and result in unnecessary waste of much money, foodstuffs and transportation."

June Accident Statistics

The Interstate Commerce Commission on August 6 made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for June and this year's first six months. The compilation, which is subject to revision, follows:

Item	Month of June		6 months ended with June	
	1946	1945	1946	1945
Number of train accidents*	1,259	1,402	7,253	8,859
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	162	158	693	721
Injured	108	108	490	568
Passengers on trains:				
(a) In train accidents*				
Killed	..	15	46	17
Injured	20	113	833	799
(b) In train-service accidents				
Killed	5	11	30	32
Injured	244	249	1,331	1,272
Travelers not on trains:				
Killed	4	2	11	5
Injured	67	69	504	548
Employees on duty:				
Killed	50	75	326	447
Injured	2,909	3,925	18,682	23,467
All other nontrespassers:**				
Killed	143	146	1,012	991
Injured	421	481	3,329	3,566
Total—All classes of persons:				
Killed	364	407	2,118	2,213
Injured	3,769	4,945	25,169	30,220

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than $150 to railway property.

** Casualties to "Other nontrespassers" happen chiefly at highway grade-crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers,* were as follows:

Persons:				
Killed	128	122	950	896
Injured	260	251	2,173	2,050

Airport Funds Apportioned

Apportionments to the states of $30,822,750 of the appropriation by Congress for airport construction and development under the federal-aid airport act for the fiscal year 1947 have been announced by the Civil Aeronautics Administration. In accordance with the formula set up in the act, the federal funds, which must be matched by sponsors of airport projects, were apportioned to the states on the basis of population and area.

The act appropriated $45,000,000 for fiscal '47, but $1,740,000 is for projects in Alaska, Hawaii and Puerto Rico—leaving $43,260,000 for projects in U. S. Of that sum, five per cent is for administration and 25 per cent of the remainder is set aside as a discretionary fund to be available for projects as determined by C.A.A. The total available for allocation among the states was, therefore, the $30,822,750 which has been apportioned.

Among the larger allocations are: Texas, $2,081,311; New York, $1,846,180; California, $1,598,582; Pennsylvania, $1,388,042; Illinois, $1,212,617; Michigan, $1,096,900; Ohio $1,030,860.

Army Plans 50-Mile Railroad

As a part of the facilities for training Military Railway Service personnel, the Army has under consideration plans for the construction of over 50 miles of auxiliary railroad at Fort Eustis, Va., according to the current issue of the Army Transportation Journal. This trackage would provide opportunity for practical training for two permanent M. R. S. units, the 714th Railway Operating Battalion and the 710th Railway Grand Division, tentatively assigned to the post-war permanent military establishment.

Passenger Car Output Rising, C. P. A. Indicates

Fifty-six railroad passenger cars were manufactured in June, as compared to 15 in May, it is disclosed in Civilian Production Administrator John D. Small's latest "Monthly Report on Civilian Production." The increase in production was attributed to an increase in the flow of special equipment and component parts, the report adding that "if deliveries of air-conditioning equipment, generators, lighting equipment, seats, roller bearings and hardware specialties continue at a reasonable rate, production of railroad passenger cars should increase further to about 100 to 150 cars per month during the latter half of 1946." The report added that the backlog of firm orders now totals 3,006 cars, of which 2,583 are for domestic roads and 423 for export.

Finds A. F. Whitney Affiliated with Communist Groups

A. F. Whitney's "purported role as champion of the railroad workers of this country is merely a convenient cloak for his support of the political and economic schemes hatched in Moscow," Representative Gibson, Democrat of Georgia, charged in a recent statement. The statement appeared in the appendix to the July 31 issue of the Congressional Record.

Mr. Gibson made it, he said, because of his feeling that "the American people are entitled to know something of the character and background of A. F. Whitney, president of the Brotherhood of Railroad Trainmen, who, after leading a paralyzing national railroad strike, threatened publicly to spend $47,000,000 of the funds of the brotherhood in an effort to discredit and defeat President Truman because he brought about an end to that strike by forthright and courageous action." The Georgia congressman went on to ask if Mr. Whitney's methods reflected the opinions and wishes of "that great body of railroad men—patriotic citizens"—who belong to the B. of R. T.; and he answered his own question in this way:

"The facts are that Whitney is not a true spokesman for the trainmen of the brotherhood. His allegiance and support is committed rather to those who would undermine the political and economic foundations of the nation, bring an end to the American way of life, and weaken our institutions by fomenting unrest and discord in every conceivable manner. Whitney has been affiliated with 17 known Communist and Communist-front organizations and has appeared as sponsor or participant in numerous subversive meetings, rallies, and propaganda campaigns. These facts are clearly established in the records of the House Committee on Un-American Activities and in the files of the Department of Justice."

Denies Truck Applications as Road Spurns Limited Rights

Because the Frisco Transportation Company had said it would not consummate the transactions if its trucking operations on the acquired routes were restricted to make them auxiliary to train services, the Interstate Commerce Commission recently denied two applications wherein this subsidiary of the St. Louis-San Francisco sought authority to purchase operating rights of independent motor carriers. The denials came in the entire commission's 6-to-4 decision in No. MC-F-2413, and in Division 4's report in No. MC-F-2529.

Determination of the issue was reached in the former decision, with dissenting commissioners protesting that the proposed acquisition there involved should have been approved, subject to such conditions as were found warranted, thus leaving to the applicant "the final determination as to whether or not consummation of the purchase is made undesirable by such restrictions." The dissenters, who joined in one expression, were Commissioners Porter, Mahaffie, Splawn and Alldredge, the first two of whom are presently assigned, with Commissioner Miller, to Division 4, which was shortly afterward confronted with a like situation in MC-F-2529.

In making its adverse ruling on the Frisco application in the latter case, the division said that its decision was "controlled by the report in MC-F-2413." It added that "although a majority of this division disagreed with the action of the majority in that proceeding, we feel constrained to follow that decision."

The rights which Frisco sought to purchase in MC-F-2413 were to be acquired from the Righter Trucking Company of Charleston, Mo., while MC-F-2529 involved the proposed acquisition of certain rights of the Missouri-Arkansas Transportation Company of Joplin, Mo. For some time prior to June 30, the railroad subsidiary had been operating the Righter routes under lease,

pursuant to temporary authority granted by the commission; and it is still operating the Missouri-Arkansas routes on that basis for a period now scheduled to expire October 31.

In passing upon the application in MC-F-2413, the commission cited its recent decision in the *Rock Island* case (*Railway Age* of March 23, page 650), which held that "except where unusual circumstances prevail, every grant to a railroad or to a railroad affiliate of authority to operate as a common carried by motor vehicle or to acquire such authority by purchase or otherwise should be conditioned as definitely to limit the future service by motor vehicle to that which is auxiliary to, or supplemental of, train service."

Following that rule, as it concluded it should in the present case, the commission majority could not authorize Frisco to purchase Righter's rights for operation on an unrestricted basis. And it found that Frisco had made no effort to justify the transaction on any other basis, the parent railroad's general manager, who is also in charge of motor transportation, having testified "that unless Frisco is permitted to operate in substantially the same manner as Righter formerly operated, except with respect to service at certain points, it would not consummate the transaction."

"The evidence submitted in support of this transaction," the commission said in summing up, "was directed toward showing that, on the basis of an all-truck service unconnected with train service of the railroad, the transaction would be consistent with the public interest. Following the *Rock Island* case, we may not approve the application on this basis, but only subject to the rendition of a substantially restricted operation, which authority Frisco does not desire and did not endeavor to show to be consistent with the public interest. Under the circumstances, we are of the opinion that approval is not warranted."

Rates on Iron Ore Called Excessive

(*Continued from page 234*)

velopment of a large group of low-grade ores.

Iron Ore Traffic Profitable—E. A. Wisco, representing Butler Brothers, a producer of low-grade iron ore, charged that "the rail rates and dumping charges applicable to Minnesota upper lake iron ore shipments are unreasonably high and discriminatory against iron ore as a commodity and against the shippers of iron ore as a class. The iron ore freight rates which have been in effect in the past years have produced excessive rates of return on investments of the carriers utilized in the transportation of iron ore, thereby imposing on the shippers of iron ore more than their just portion of the cost of service.

"For the period from 1937 to 1945 inclusive, the earnings of the Duluth, Missabe & Iron Range, the Great Northern earnings for the state of Minnesota, and the combined G. N. freight service earnings for the states of Minnesota and Wisconsin were more than sufficient to permit adjustments of wage, material and fuel expenses to 1946 cost levels and still provide revenues in excess of a reasonable return. After provision for increased labor, material and fuel costs to 1946 levels, the returns to the D. M. & I. R. and to that portion of the G. N. system devoted to iron ore transportation will continue to be excessive and discriminatory under existing rates."

The Chicago hearings were concluded on August 1, with testimony by spokesmen for retail lumber dealers and by representatives of Southern and Western lumber producers.

Port Differentials Upset—The regional hearing at Buffalo, N. Y., got under way August 5, when Edward K. Laux, traffic manager of the Port of New York Authority, appeared for that organization, trade and commercial interests, and New York city. His testimony emphasized the objections of New York to the increase of 5 per cent in freight rates applicable in Official territory July 1, in addition to the general restoration of the Ex Parte 148 increases at that time. The extra Official territory increase, he contended, disrupted port differentials of long standing, and, if allowed to continue, would, he said, cause the port of New York serious injury, while favoring ports on the Gulf of Mexico and South Atlantic coasts.

A further increase in rates, with the continuation of the extra Official territory rise, would be even more serious, the witness declared, and he went on to point out that restoration of port differentials would be a lengthy task in view of the complicated tariffs involved.

Speaking for the Reynolds Metals Company of Richmond, Va., L. E. Galespie asserted that the institution of higher rail freight rates would force that company to do a large part of its hauling in trucks, either its own fleet or by contract arrangement. Where water transportation is available, it, too, would be used if railroad rates are made higher, he said, and he argued that a further increase on aluminum and products would produce no more revenue for the railroads than they now receive because of such diversions of tonnage to other carriers.

Other objections to the proposed increases in rates on iron ore were made at Buffalo by William E. Fowler, speaking for a group of steel manufacturers. The railroads already are receiving an "unreasonable profit" from the transportation of this commodity, he insisted. Other witnesses included representatives of automobile manufacturers, whose objections ran to details more than to the general proposal that rates be increased.

Representation of Employees

As the result of a recent election which has been certified by the National Mediation Board, the Order of Railway Conductors, by virtue of a 370 to 228 victory over the Brotherhood of Railroad Trainmen, has extended its coverage to include all road conductors employed by the Atlantic Coast Line.

Prior to the election, conductors on the road's Western division (the former Atlanta, Birmingham & Coast) were represented by the B. of R. T., while road conductors on the remaining portion of the line were represented by the victorious union.

The Brotherhood of Railroad Trainmen has been designated to represent yardmasters employed by the Northampton & Bath, according to the results of a recent election which has been certified by the National Mediation Board. These employees formerly were without representation.

The B. of R. T. also retained its right to represent yardmen, including foremen and helpers, on the Des Moines Union, where it had been challenged by the Switchmen's Union of North America; and the Brotherhood of Locomotive Firemen & Enginemen will continue to represent firemen (Diesel-electric locomotive helpers) and hostlers employed by the Bush Terminal, where it defeated the Brotherhood of Locomotive Engineers.

Supervisors Are Only Subordinate Officials

(*Continued from page 235*)

the commission's decisions on these matters have unduly stressed facts "which are of little or no importance," such as authority to make a final determination with respect to hiring or dismissing an employee. "We well know," he added, "that many of the actions taken by offiicals of railroads are subject to the approval of their superiors in position." With respect to the present case, the dissenting commissioner was of the opinion "that the work, duties, and responsibilities of the various persons involved . . . mark them as officials of these respondents and a part of their respective managements."

Congress' Streamlining Plan Approved by President

Congress' organization and procedures will be "streamlined" under the provisions of S. 2177, the recently-enacted bill which was signed by President Truman on August 2. Congressional action was completed during the latter days of the recent session when House amendments were accepted by the Senate which had passed its version of the legislation on July 10, as reported in the *Railway Age* of June 15, page 1197.

Among provisions of the final version are those which reduce the number of standing committees of the Senate from 33 to 16 and those of the House from 48 to 19. The new set-up provides for committees on interstate and foreign commerce in both the House and Senate, the House committee to consist of 27 members as compared with the present membership of 28 and the Senate committee to have 13 members as compared with the present committee on interstate commerce's membership of 21. Under the reorganization plan, each senator will be limited to membership on two committees and each House member to one.

The new Senate committee on interstate and foreign commerce will not only take over the work of the committee on interstate commerce; it will also have jurisdiction over matters heretofore handled by the committees on commerce, interoceanic

canals and manufactures. Among other things, legislation referred to the new committee will include matters relating to interstate and foreign commerce generally and the regulation of interstate railroads, motor carriers, pipe lines, air carriers, water carriers, and communications facilities. The committee will not have jurisdiction over rivers and harbors and highway legislation, nor legislation relating to railroad labor and the railroad retirement and unemployment systems. The waterway and highway legislation will go to the committee on public works, while labor and pension and unemployment bills (except revenue measures) will go to the committee on labor and public welfare.

In the House also the jurisdiction of the committee on interstate and foreign commerce will be broadened, principally by the addition of duties heretofore performed by the committee on coinage, weights, and measures. The committee already had, and retains, jurisdiction over legislation relating to the regulation of railroads, motor carriers, air lines, domestic water carriers, pipe lines, and communications facilities. Also, it retains jurisdiction over legislation relating to "railroad labor and railroad retirement and unemployment, except revenue measures relating thereto." Like the Senate, the House will have a new committee on public works to which rivers and harbors and highway bills will be referred.

Also embodied in the legislation is a "general bridge act" which eliminates the necessity for a special act of Congress to authorize the construction of each individual bridge by giving general consent to all bridges, the locations, plans, and specifications of which are approved by the Secretary of War and the Army's chief of engineers. Other provisions tighten controls on lobbying activities, requiring "lobbyists" to register and file financial reports. Also included are congressional pay-increase and pension provisions. The annual salary of members is raised $10,000 to $12,500, plus a $2,500 tax-free expense allowance, and retirement-pay arrangements are set up.

Enactment of this legislation will require a complete reorganization of committees of both houses of Congress, with reductions in membership and probably the selection of new chairmen in several cases. The chairmanship of the Senate committee on interstate and foreign commerce is one that will be affected by the new provisions, particularly, as it will become vacant through the failure of Senator Wheeler, Democrat of Montana, to win reelection.

I. C. C. Interprets Car Spotting Tariff

(*Continued from page 235*)

convenience . . . provided the locomotives in general use for switching in the vicinity of the plant site can safely operate over the track within the plant site."

Charge for Delays—When receipt and delivery of cars cannot be accomplished in the foregoing manner, the tariff provides in Rule III that, where the delay "will be of a temporary nature," the locomotive will be held "at the nearest available location and the service completed when conditions permit." In such a situation the tariff assesses a charge of $1 for each five minutes or fraction thereof in excess of 30 minutes delay to the locomotive, like charges also applying "when delays encountered during a locomotive trick or shift aggregate more than 30 minutes."

Finally, it is provided that, if the obstructing conditions are not removed "after a reasonable period of delay," the carrier may, at its option, place the car or cars on a hold or other available track, within or without the plant, meanwhile charging for the delay on the foregoing basis. Subsequent movements from the hold tracks to the actual points of delivery are subject to a charge of $3.47 per car.

The tariff was brought into the present proceeding at the request of the parties, it being agreed that the commission should take official notice of it. The majority report got around to the interpretation after it had reviewed evidence leading it to conclude that changed conditions at the plant since the time of the prior report were not such as to warrant different findings. It noted that the tariff, as published, is applicable at the Argo plant, and it recalled that Corn Products had filed a petition last December seeking suspension of the tariff "on the ground that the rules might be interpreted as providing for charges in addition to the line-haul rates at its plant and because it was alleged that the rules do not clearly and unambiguously carry out what the industry conceives to be the purpose of the tariff, namely, of providing free switching service at its plant and others where similar conditions exist."

The commission's conception of the tariffs purpose was different. It read the rule offering spotting service at no additional charge over the line-haul rates as one applying to "what has been referred to in these proceedings as 'simple switching delivery' or 'simple switch placement'." And "it does not apply to an industry such as the Corn Products Refining Company's plant which has a complicated system of about 23½ miles of track covering 200 acres." The tariff as a whole, the commission said, was "in full accord" with the principles it had laid down, except that Rule III, relating to the charges for delays, "contains new and additional provisions not heretofore considered."

"Temporary" Defined—The delays contemplated by the rule, the report emphasized, are those "of a temporary nature"; and "that phrase means when the delay is due to an unusual, infrequent, occasional, and not recurring cause which is of limited duration." The rule, therefore, "does not apply to delays or interferences or interruptions that are inherent in or arise repeatedly out of industrial operations or the inadequacy or complexity of plant tracks or facilities. It provides charges for delays not heretofore considered in these proceedings and in no way modifies or enlarges the carriers' obligations as heretofore determined in these proceedings. Rule III has no application at the Corn Products Refining Company's plant."

Continuing, the commission said that the rule seems "clear and unambiguous" when considered in connection with the tariff's Notes 1 and 2 which, in turn, define "continuous movement" and "ordinary operating convenience." The report nevertheless went on to interpret Note 1's reference to the breaking of "continuous movement" by delays "for which the industry is directly responsible."

"Attempts," the commission said, "have been made in the past to interpret the phrase 'for which the industry is directly responsible,' and words of similar import as requiring some specific order or affirmative act by the industry. For example, the contention has been made that if the industry says to a carrier 'there is the plant, switch it,' that the industry is not responsible for interference or interruptions caused by the movement of intraplant or intrastate traffic, but that the carriers are responsible for such interference. The proper interpretation of that phrase is that the burden is on the industry to furnish adequate tracks and facilities for the performance of the switching in its plant and that it is directly responsible for all circumstances and conditions that interfere with or prevent a continuous movement except such as are due to war, insurrection, and what are usually accepted and referred to as acts of God, or where the carrier may, at its option, avoid such interruptions or interferences, but fails to do so."

Finds Motor Carriers in Need of Much New Equipment

For-hire motor carriers of property will require from 242,000 to 372,000 new vehicles, while bus operators will require from 40,000 to 58,000 in the three post-war years beginning with 1946, according to a study which has been issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The study, entitled "Motor Carrier Facilities—War Use and Post-War Needs," was prepared by Paul L. Ambelang under the supervision of Charles S. Morgan; it is Statement No. 4612 of the bureau.

The foregoing figures include the equipment needs of local as well as inter-city carriers, and the range is due to the fact that estimates were made on the basis of three different forecasts of 1946, 1947, and 1948 traffic. The traffic forecasts are based in part on those in "Post-War Traffic Levels," published by the bureau in 1944, the results in round numbers indicating from 10 to 15 billion passenger-miles in inter-city bus traffic and from 20 to 33 billion ton-miles of inter-city for-hire truck traffic. The upper level for local traffic, both property and passenger, was considered to be about 45 per cent above the depression level.

The estimates of the new vehicle requirements take into account, among other things, the condition of present vehicles after the intensive use and undermaintenance to which they were subjected during the war years. The indicated requirements represent from over a third to over a half of the total vehicles in for-hire service in 1940.

"The cost of these vehicles," the report's summary says, "is estimated to be between $616,000,000 and $945,000,000 for property carrying vehicles and from $473,000,000 to $682,000,000 for buses. These amounts are

hound, through purchase of capital stock and merger, of the operating rights and property of Enders Bus Lines, Inc., and purchase by Central Greyhound of New York of certain operating rights and property of the White Star Coach Lines.

The Enders route is between Kalamazoo, Mich., and South Bend, Ind., while the rights to be acquired from White Star cover operations on a route between Elmira, N. Y., and Ithaca. The decision also authorizes the Greyhound Corporation, Central's parent, to acquire control of the rights involved.

In the latter connection, the commission noted that the Greyhound Corporation now owns 72.73 per cent of Central's outstanding Class B voting common stock, and that N. Y. C. owns the remainder. Greyhound owns all of the Class A voting stock and all of the preferred stock outstanding. This set-up has come about since the date of the first hearing in the proceeding (October, 1944) when Greyhound owned 55 per cent of Central's Class B voting common stock, the remaining 45 per cent having been owned by the railroad which also had an option to purchase 100,000 of the 200,000 shares of the Class B common. In concluding that Central is not now affiliated with the railroad within the meaning of section 5(6), the commission had this to say:

"The instant record bears out applicants' contention that Central's operations are managed and controlled primarily by Greyhound and its officials, and that the top policy matters are determined by the latter without influence or attempted domination by the railroad through its representatives or otherwise. Illustrations of that record indicate that suggestions of the railroad's representatives at board meetings looking toward increased dividend payments have been outvoted or not followed by Greyhound representatives; and, in other instances, the railroad itself has opposed expansion of Central's bus service before local authorities, which expansion was supported by Central's board of directors, including the railroad representatives."

Also, the Division recalled that on "a substantially similar set of facts" it affirmed in November, 1945 (*Railway Age* of December 1, 1945, page 913) a prior finding (*Railway Age* of May 13, 1939, page 848) to the effect that another stock-controlled subsidiary of Greyhound, Northland Greyhound Lines, "was not affiliated with the Great Northern even though the latter owned approximately 45 per cent of its stock and had four of nine representatives on its board of directors."

The majority report represents the view of Commissioners Porter and Mahaffie, while Commissioner Miller filed a dissenting-in-part expression. He agreed with the approval of the acquisitions, but was unable to subscribe to the majority finding that Central Greyhound is not affiliated with N. Y. C. On that score, Mr. Miller turned up another prior report (not cited by the majority) "which is the latest commission view on the question of affiliation" and "is controlling in this proceeding."

It was the July, 1943, decision wherein the entire commission found the Southwestern Greyhound Lines affiliated with the Southern Pacific and St. Louis-Southwestern (see *Railway Age* of July 31, 1943, page 219). "Although the question of affiliation must rest on the facts of each particular case," Mr. Miller continued, "I submit that the facts in the instant proceeding respecting affiliation were more persuasive than those" in the Southwestern case. At the same time, he would have approved the transactions, as noted above, with a holding that the special showing required by section 5(2) (b) had been made.

Disregard of Signals Held Collision Cause

(*Continued from page 236*)

both in service and emergency applications. The brake-cylinder piston travel of the nine cars varied between 6½ in. and 9¼ in. The piston travel of one car only was in excess of 9 in.

A few days after the accident a series of braking tests was conducted with a train comparable in weight, braking ratios and consist to that of No. 39 on the day of the accident. During one test a speed of 81 m.p.h. was attained and a 30-lb. brake-pipe reduction, which was initiated at signal 227.1, stopped the train at a point 395 ft. east of signal 228.1. During the next test, a speed of 85 m.p.h. was reached, and a 30-lb. brake-pipe reduction, which was initiated at signal 227.1, stopped the train at a point 33 ft. east of signal 228.1. During another test, an emergency application made at a point 2,202 ft. east of signal 228.1, where the I.C.C. inspectors said that the first unobstructed view of signal 228.1 can be obtained, stopped the train from a speed of 86 m.p.h. in a distance of 3,529 ft., at a point 1,327 ft. west of signal 228.1, and 393 ft. west of the point of accident. (For a complete description of these tests, see the *Railway Age* of May 11, page 959.)

According to the commission's report the flagman of No. 11 was in the front end of the twelfth car at the time the brakes were applied approaching Naperville and he went immediately to the rear of his train. He said that it was not his practice to drop fuses from a train moving at high speed as the fuses would not remain lighted. However, in tests made after the accident it was found that fuses dropped from trains moving 40 m.p.h. or less would remain lighted. It was also disclosed that although No. 11 was equipped to display an oscillating red light to the rear, the flagman did not operate the switch to energize this light. He did, however, proceed to the rear of his train with flagman's signals immediately after it had stopped.

Signal Ignored—The report said that as No. 39 approached Naperville at a speed of about 80 m.p.h., both enginemen were in the control compartment at the front of the locomotive, and that other members of the train crew were at various locations throughout the cars in the train. Signal No. 227.1 was held to have displayed "approach" for No. 39, which required, according to timetable instructions, that the speed of the train be at once reduced so as to stop short of train or obstruction. "Had this signal been observed and this instruction complied with," the report says, "this accident would have been prevented."

Signal 228.1, which was also passed by No. 39 before the collision, was found to have displayed "stop-then-proceed." Signal 227.1 could be seen from the control compartment of No. 11 throughout a distance of 5,000 ft., and in tests after the accident both this signal and signal 228.1 functioned properly. Examination of the locomotive of No. 39 after the accident disclosed that the brake-valve was in service position and there was no indication of an emergency application of the brakes having been made.

Commenting on the close headway between these trains, the report said that under such conditions enginemen "should be especially alert at all times." However, it added, "an increase of the time interval between these schedules will not necessarily prevent similar accidents, because trains scheduled 15 or more minutes apart at initial terminal can close up until a situation develops similar to the one involved in the accident here under investigation."

Although the report asserted that: "If an adequate train-stop or train control system had been in use and functioning properly, the speed of No. 39 would have been controlled in accordance with the conditions of track occupancy ahead, regardless of any inaction on the part of the engineer, and this accident would have been averted," and said that a cab signal system with an audible warning signal might have prevented the collision, no finding was made in this respect, since the entire matter of railway signal systems is now under consideration in the No. 29543 proceeding.

Concerning the action of the equipment in the collision, the commission's report says: "The thirteenth, or rear car of No. 11, was of conventional all-steel construction, and weighed 160,300 lb. As a result of direct shock in the collision, the center-sills were bent downward about 18 in. at the rear end, and the bend extended to the rear bolster. The first unit of the locomotive of No. 39 was deflected upward; it entered the rear car above the floor level, and the superstructure was destroyed about three-fourths the length of the car. As a result of the upward deflection of the first unit of the locomotive, the buffing members of the rear car did not receive the full force of the collision. A considerable amount of the force was dissipated in the twelfth, eleventh, tenth and ninth cars.

The greatest property damage and practically all the deaths occurred in the thirteenth and eleventh cars. The twelfth car was of conventional all-steel construction, and weighed 169,800 lb. It was not damaged extensively. The eleventh, tenth and ninth cars were of lightweight construction, and weighed, respectively, 115,800, 112,950 and 110,700 lb. The eighth and seventh cars were of conventional all-steel construction and weighed, respectively, 139,700 and 141,800 lb. The eleventh car stopped in reverse direction. It was bent in an U-shape. The section between the body bolsters was demolished, and the sections between the body bolsters and the ends were considerably damaged. The

canals and manufactures. Among other things, legislation referred to the new committee will include matters relating to interstate and foreign commerce generally and the regulation of interstate railroads, motor carriers, pipe lines, air carriers, water carriers, and communications facilities. The committee will not have jurisdiction over rivers and harbors and highway legislation, nor legislation relating to railroad labor and the railroad retirement and unemployment systems. The waterway and highway legislation will go to the committee on public works, while labor and pension and unemployment bills (except revenue measures) will go to the committee on labor and public welfare.

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(*Continued from page 235*)

convenience . . . provided the locomotives in general use for switching in the vicinity of the plant site can safely operate over the track within the plant site."

Charge for Delays—When receipt and delivery of cars cannot be accomplished in the foregoing manner, the tariff provides in Rule III that, where the delay "will be of a temporary nature," the locomotive will be held "at the nearest available location and the service completed when conditions permit." In such a situation the tariff assesses a charge of $1 for each five minutes or fraction thereof in excess of 30 minutes delay to the locomotive, like charges also applying "when delays encountered during a locomotive trick or shift aggregate more than 30 minutes."

Finally, it is provided that, if the obstructing conditions are not removed "after a reasonable period of delay," the carrier may, at its option, place the car or cars on a hold or other available track, within or without the plant, meanwhile charging for the delay on the foregoing basis. Subsequent movements from the hold tracks to the actual points of delivery are subject to a charge of $3.47 per car.

The tariff was brought into the present proceeding at the request of the parties, it being agreed that the commission should take official notice of it. The majority report got around to the interpretation after it had reviewed evidence leading it to conclude that changed conditions at the plant since the time of the prior report were not such as to warrant different findings. It noted that the tariff, as published, is applicable at the Argo plant, and it recalled that Corn Products had filed a petition last December seeking suspension of the tariff "on the ground that the rules might be interpreted as providing for charges in addition to the line-haul rates at its plant and because it was alleged that the rules do not clearly and unambiguously carry out what the industry conceives to be the purpose of the tariff, namely, of providing free switching service at its plant and others where similar conditions exist."

The commission's conception of the tariffs purpose was different. It read the rule offering spotting service at no additional charge over the line-haul rates as one applying to "what has been referred to in these proceedings as 'simple switching delivery' or 'simple switch placement'." And "it does not apply to an industry such as the Corn Products Refining Company's plant which has a complicated system of about 23½ miles of track covering 200 acres." The tariff as a whole, the commission said, was "in full accord" with the principles it had laid down, except that Rule III, relating to the charges for delays, "contains new and additional provisions not heretofore considered."

"Temporary" Defined—The delays contemplated by the rule, the report emphasized, are those "of a temporary nature"; and "that phrase means when the delay is due to an unusual, infrequent, occasional, and not recurring cause which is of limited duration." The rule, therefore, "does not apply to delays or interferences or interruptions that are inherent in or arise repeatedly out of industrial operations or the inadequacy or complexity of plant tracks or facilities. It provides charges for delays not heretofore considered in these proceedings and in no way modifies or enlarges the carriers' obligations as heretofore determined in these proceedings. Rule III has no application at the Corn Products Refining Company's plant."

Continuing, the commission said that the rule seems "clear and unambiguous" when considered in connection with the tariff's Notes 1 and 2 which, in turn, define "continuous movement" and "ordinary operating convenience." The report nevertheless went on to interpret Note 1's reference to the breaking of "continuous movement" by delays "for which the industry is directly responsible."

"Attempts," the commission said, "have been made in the past to interpret the phrase 'for which the industry is directly responsible,' and words of similar import as requiring some specific order or affirmative act by the industry. For example, the contention has been made that if the industry says to a carrier 'there is the plant, switch it,' that the industry is not responsible for interference or interruptions caused by the movement of intraplant or intrastate traffic, but that the carriers are responsible for such interference. The proper interpretation of that phrase is that the burden is on the industry to furnish adequate tracks and facilities for the performance of the switching in its plant and that it is directly responsible for all circumstances and conditions that interfere with or prevent a continuous movement except such as are due to war, insurrection, and what are usually accepted and referred to as acts of God, or where the carrier may, at its option, avoid such interruptions or interferences, but fails to do so."

Finds Motor Carriers in Need of Much New Equipment

For-hire motor carriers of property will require from 242,000 to 372,000 new vehicles, while bus operators will require from 40,000 to 58,000 in the three post-war years beginning with 1946, according to a study which has been issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The study, entitled "Motor Carrier Facilities—War Use and Post-War Needs," was prepared by Paul L. Ambelang under the supervision of Charles S. Morgan; it is Statement No. 4612 of the bureau.

The foregoing figures include the equipment needs of local as well as inter-city carriers, and the range is due to the fact that estimates were made on the basis of three different forecasts of 1946, 1947, and 1948 traffic. The traffic forecasts are based in part on those in "Post-War Traffic Levels," published by the bureau in 1944, the results in round numbers indicating from 10 to 15 billion passenger-miles in inter-city bus traffic and from 20 to 33 billion ton-miles of inter-city for-hire truck traffic. The upper level for local traffic, both property and passenger, was considered to be about 45 per cent above the depression level.

The estimates of the new vehicle requirements take into account, among other things, the condition of present vehicles after the intensive use and undermaintenance to which they were subjected during the war years. The indicated requirements represent from over a third to over a half of the total vehicles in for-hire service in 1940.

"The cost of these vehicles," the report's summary says, "is estimated to be between $616,000,000 and $945,000,000 for property carrying vehicles and from $473,000,000 to $682,000,000 for buses. These amounts are

based on prices paid by Class I carriers in 1940. The average bus cost of those carriers was $12,574 in 1940 and $11,633 in 1944. Some property-carrying vehicles also declined in price in this period. The explanation lies in differences in type of construction. With the foregoing in mind, the range at 1944 prices would be from $638,000,000 to $979,000,000 for property-carrying vehicles and from $444,000,000 to $644,000,000 for buses. These purchases would be spread over three years; the costs generally would be spread over a longer period.

"Present indications are that actual expenditures in the three-year period will most nearly approach the levels indicated by the intermediate estimates. If such proves to be the case, the forecasts would indicate the purchase of 296,500 property-carrying vehicles and 48,500 buses at a cost, at 1940 and 1944 prices, of $759,000,000 and $785,000,000, respectively, in the case of trucks and of $569,000,000 and $540,000,000, respectively, in the case of buses. If, however, the 'boom' level should be attained, the expenditures for trucks would be at an estimated maximum, at 1940 and 1944 prices, of $945,000,000 and $979,000,000, respectively, and for buses, $682,000,000 and $644,000,000, respectively."

While the ability of the motor carriers to finance purchases of the magnitudes indicated was not examined in the study, the author considers it "likely that most carriers can justify and make the expenditures called for under these estimates." In addition to the new-equipment requirements, the study estimates that bus operators have deferred vehicle maintenance to make up in the amount of from $11,000,000 to $13,000,000, plus "whatever costs are to be incurred in repairing terminals." Also mentioned are plans "being made for expansions and modernization of bus and truck terminals, in some cases by carriers jointly."

With respects to the study's forecasts generally, Dr. Morgan says in his introduction that "owing to the paucity of information on some points and to the uncertainties which necessarily surround any forecast, each of the estimates of future expenditures must be considered only an approximation."

Halts Contract Awarding for Government Construction

Reconversion Director John R. Steelman on August 5 ordered all agencies of the federal government to stop awarding construction contracts under what the O. W. M. R. press release called "the proposed $1,600,000,000 public works program." The release went on to say that Mr. Steelman had told officials of executive agencies "at a White House conference" that the federal construction program "would have to be cut by approximately $700,000,000 to conform to the President's anti-inflation budget."

The Steelman order was embodied in O. W. M. R. Directive 128, effective from August 6 until October 1, during which period no federal contracts for any new construction can be awarded without the express permission of O. W. M. R. Contracts already awarded and funds which have been committed for work scheduled to start before October 1 will not be affected.

Under the directive, all federal agencies are required to review and revise their construction expenditure estimates and submit them to the Civilian Production Administration before the expiration of the contract moratorium. Housing projects will be revised separately by the national housing expediter. "Following this review," the press release went on, "the civilian production administrator and the national housing expediter will recommend to the reconversion director the projects and programs which should be allowed to start between October 1 and March 31, 1947. After reviewing these recommendations, the reconversion director will direct the civilian production administrator and the national housing expediter to authorize each executive agency to proceed with approved non-deferrable projects."

79th Congress Closes Last Regular Session

(*Continued from page 234*)

ing" act which makes it a felony for any person to commit robbery or extortion that in any way obstructs or affects interstate commerce or the movement of any article or commodity in interstate commerce.

The ground was broken in a new field of subsidy legislation with passage of the federal-aid airports act, while rivers and harbors authorization and appropriation bills of the usual type were also enacted. Among the fiscal 1947 appropriations approved was the $525,000 which will keep the Office of Defense Transportation in business until next April 30. And the House gave Chairman Lea of its committee on interstate and foreign commerce $35,000 to finance the "national transportation inquiry" on which he has launched that committee. Finally, the Congress provided for the "streamlining" of its own organization and procedures, as noted elsewhere herein.

At the 1945 session, the principal action of interest to the railroads was passage of the Boren act which will bring about repeal of remaining provisions of the land-grant-rate law on October 1. This act's sponsor, Representative Boren, Democrat of Oklahoma, a member of the House committee on interstate and foreign commerce, was defeated for renomination in his state's recent primary election. Others defeated in recent primaries include Senator Wheeler, Democrat of Montana, chairman of the Senate committee on interstate commerce, and Senator Shipstead, Republican of Minnesota, who has also been a member of that committee. A third member of the committee who will not return next year is Senator Austin, Republican of Vermont, who has resigned from the Senate to become the United States representative on the United Nations' Security Council.

No Seaway Legislation—While they lost out on the Bulwinkle bill, as noted above, the railroads could take some comfort in the death also of the resolution to approve the United States-Canadian agreement for construction of the St. Lawrence seaway and power project. Other pending legislation which is likewise dead unless revived by a special-session call includes proposals to give the I. C. C. various additional powers, including authority to set aside motor vehicle size and weight regulations of the states; to require the pooling of railroad revenues derived from general rate increases; and to extend to carrier associations, such as the Association of American Railroads, the commission's authority to inspect records and require reports.

Also, there were the bills to give the commission regulatory authority over train dispatching; to authorize it to order railroads to install and maintain wayside and train communication systems; and to require the "adequate" lighting of cabooses. The commission failed to get the Locomotive Inspection Act amendments which it sought, nor did Congress meet its request for various Interstate Commerce Act amendments, such as those which would have strengthened its powers with respect to examining accounts of companies furnishing railroads with protective services to perishable freight, and given it authority to prescribe rules for the extension of credit by express companies. Then, there were the uniform freight-rate bills and bills to increase the period of limitation on actions against carriers for overcharges; superhighway bills; and proposals to establish various regional authorities of the T. V. A. variety.

Among the presentations made at congressional hearings during the session was that wherein Secretary of Commerce Wallace revealed to a House appropriations subcommittee his view that "now is the appropriate time" to offer the government-owned Inland Waterways Corporation for sale to private interests. The committee's response was a recommendation against "early disposal" of the government barge lines.

Car Service Orders

Amendment No. 5 to Service Order No. 369 and Amendment No. 1 to Service Order No. 559 have been issued by the Interstate Commerce Commission to provide that those orders' provisions exempting cars handling import, export, coastwise or intercoastal traffic from the super-demurrage charges apply only to cars held at points of transfer from rail to water or water to rail, or at U. S. border crossings.

Amendment No. 1 to Service Order No. 558 permits "other packaging or packing materials" as well as vegetable containers and box shooks to be shipped in refrigerator cars which are substituted for box cars for movements from origins in Washington, Oregon and California to destinations in California.

Revised Service Order No. 105 superseded Service Order 105 on August 5; it applies to intrastate as well as interstate traffic the prohibition against back-hauling of company material. The superseding order expires December 10, unless otherwise modified.

Amendment No. 1 to Service Order No. 550 authorizes the permit agent for lake-cargo coal movements to divert coal en route to Toledo, Ohio, or Sandusky from one port to the other or to different Toledo

piers as necessary to avoid excess accumulations.

Service Orders Nos. 572 and 573 place embargoes, respectively, against the Midland Warehouse Corporation, Kansas City, Mo., and L. J. Cohen, Universal Machinery, Inc., and Consolidated Machine Company, Minneapolis, Minn. Both orders noted that railroad embargoes had been placed against these companies; but the railroads "have and are disregarding their embargo."

Expiration dates of several other service orders have been advanced by the commission, the orders extending amendments, and new expiration dates being as follows:

No. 70 which restricts the number of diversions or reconsignments permissible on refrigerator cars loaded with fresh or green fruits or vegetables. Amendment No. 4—May 10, 1947.

No. 82 which requires railroads to make joint use of terminals within the Louisville (Ky.) switching district. Amendment No. 1—September 10, 1946.

No. 87 which modifies the free time allowed on tidewater coal and coal products at North Atlantic ports. Amendment No. 3—November 10, 1946.

No. 129 which suspends the operation of Section 2, Rule 32, of the Consolidated Freight Classification insofar as it requires payment for body ice removed from refrigerator cars by consignees. Amendment No. 1—December 10, 1946.

No. 135 which increases demurrage charges on carload export traffic held at Mexican border points. Amendment No. 2—February 5, 1947.

No. 201 (first revised) which places restrictions on the use of refrigerator cars for transporting ice. Amendment No. 1—November 17, 1946.

No. 213 which requires railroads and sleeping car companies to give preference and priority to invalid service men traveling to or from points of hospitalization. Amendment No. 1—March 8, 1947.

No. 221 which directs railroads serving Oregon and Washington to substitute cars shorter than 40 ft. 6 in, when longer cars are ordered for loading cedar shingles. Amendment No. 2—December 5, 1946.

No. 234 which reduces to three days the free time on l. c. l. held at border points for export to Mexico. Amendment No. 1—September 20, 1946.

No. 240 which restricts the number of diversions or reconsignments on refrigerator cars loaded with potatoes. Amendment No. 1—May 18, 1947.

No. 260 which prohibits salting of ice in refrigerator cars handling citrus fruits from California, Arizona, Texas, and Florida. Amendment No. 2—January 2, 1947.

Accident Caused by Excessive Speed on Curve

"Excessive speed on a curve on which the track was not properly maintained" caused the Pennsylvania's May 27 derailment near Royalton, Pa., a station 10 miles east of Harrisburg, where two passengers and one train-service employee were killed and 43 passengers and seven employees were injured, according to the report of an Interstate Commerce Commission investigation under the supervision of Commissioner Patterson. The accident, in which an eastbound extra passenger train hauled by a steam locomotive was involved, occurred 3.17 miles east of the station at Royalton on the 11.6-mile section of the Philadelphia division extending between Royalton and Shocks, Pa.—a double-track line equipped with an overhead catenary system for electric operation.

From the west there are, in succession, a compound curve to the right 1,657 ft., the maximum curvature of which is 2 deg., a tangent 140 ft., and a curve to the left, the specified curvature of which is 6 deg., extending about 140 ft. to the point of the accident and about 139 ft. further eastward. The specified superelevation of the latter curve is 4½ in., and it is laid with 130-lb. rail. "At the point of derailment," the report said, "the curvature was 8 deg., the superelevation was 2⅛ in., and the gage was 4 ft. 9 in."

Trains moving in the territory with the current of traffic are operated by automatic-block signal and cab-signal systems, a continuously-lighted, position-light signal governing eastbound movements on the eastward main track being located 2,503 ft. west of the point of the accident. The maximum authorized speed for passenger trains in the territory is 40 m. p. h., and instructions governing the braking of passenger trains provide that when it is necessary to apply the train brakes to reduce the speed around curves, the reduction in speed must be made and the engine and train brakes fully released before the engine enters the curve.

The train, Passenger Extra 3727 East, consisted of a 4-6-2 type steam locomotive, one express-box car and seven sleepers, all of steel construction. It departed from Royalton at 2:47 p.m., stopped "at least 10 seconds" 2,000 ft. east thereof, passed the above-mentioned signal which displayed proceed, and "while moving at a speed estimated to have been approximately 60 m. p. h.," the engine and the first five cars were derailed. The locomotive stopped 35 ft. down an embankment with its front end 423 ft. east of the point of derailment, the engine truck, which was torn loose, being another 130 ft. east. The tender remained coupled to the locomotive but the first car tore loose and went down the embankment to a point 28 ft. east of the engine's front end. The second and third cars also went down the embankment, while the fourth and fifth remained upright on the roadbed. The locomotive and first three cars were "badly damaged," the engine cab being "demolished"; and the fourth and fifth cars were "slightly damaged." The engineer was the employee killed.

The investigation disclosed no defective condition of the locomotive, nor any condition that would prevent the proper application of the train brakes. There was no indication of dragging equipment or any obstruction having been on the track. The fireman said that when the train was approaching the curve to the right, located immediately west of the curve on which the derailment occurred, the engineer made a service brake-pipe reduction, and when the engine entered the curve to the left the engineer closed the throttle and made another reduction. The fireman, as the report put it, "was not certain whether the brakes were released between these brake-pipe reductions." The derailment occurred before the brake-pipe exhaust of the second reduction had ceased.

The locomotive was not equipped with a speedometer, but the fireman and members of the train crew "thought the highest speed attained between Royalton and the point of accident was about 40 m. p. h., and they estimated the speed at the time of derailment as about 35 m. p. h." On the basis of the time it took the train to make the run from Royalton, however, the commission calculated that the average speed over the 3.164 miles was about 43 m. p. h., and the report asserted that "in some of the territory between the point where the train stopped immediately east of Royalton and the point where the derailment occurred a speed considerably higher than 43 m. p. h. was attained." The time of the derailment—2:52:30 p.m. "was automatically recorded at the time the power line was broken as a result of the accident."

Marks on the track and the position of the derailed equipment after the accident made it "apparent" to the commission that the speed of the train "was approximately the overturning speed for this curve." The report conceded that the overturning speed would be 77 m. p. h. on a 6-deg. curve having a superelevation of 4½ in., the "specified" curvature and superelevation of the curve involved; but it cited its findings that the curvature was 8 deg. and the superelevation 2⅛ in. at the point of derailment. And it cited also testimony of the division engineer, who "said that under these conditions the maximum safe speed for engine 3727 was 37.5 m. p. h. and the overturning speed was 62.25 m. p. h."

Thus, "the maximum authorized speed [40 m. p. h.] in this territory was 2.5 m. p. h. in excess of the maximum safe speed for the actual curvature and superelevation existing on the curve where the derailment occurred," the report said. It went on to mention the "irregularities in alinement, gage and cross levels," and the fireman's statement that the brakes were applied when the train entered the curve. "These factors combined with a speed somewhat less than the theoretical overturning speed would cause the engine to overturn," the report concluded. The curve involved had been realined three months prior to the date of the accident.

O. D. T. Permit Agent

Authority to issue special permits under the Office of Defense Transportation's freight-car-loading orders has been delegated to J. P. Kiernan, assistant director of the Railway Transport Department. The orders are General Order ODT 1 Revised and General Order ODT 18A Revised which were recently reissued as noted in the *Railway Age* of August 3, page 201.

Argument Set for September 18 in Express Rate Case

The Interstate Commerce Commission has assigned the Ex Parte 163 proceeding wherein the Railway Express Agency is seeking a general increase in rates for oral argument before the entire commission at Washington, D. C., on September 18.

Central Greyhound Is "Not Affiliated" with N. Y. C.

Finding that Central Greyhound Lines is "not affiliated" with the New York Central within the meaning of the Interstate Commerce Act's section 5(6), Division 4 of the Interstate Commerce Commission has approved two acquisitions by that bus operator without applying that requirement of section 5(2)(b) which calls for a special showing that the transactions would enable the railroad "to use service by motor vehicle to public advantage in its operations" and would not "unduly restrain competition." The decision in No. MC-F-2593 authorizes acquisition by Central Grey-

hound, through purchase of capital stock and merger, of the operating rights and property of Enders Bus Lines, Inc., and purchase by Central Greyhound of New York of certain operating rights and property of the White Star Coach Lines.

The Enders route is between Kalamazoo, Mich., and South Bend, Ind., while the rights to be acquired from White Star cover operations on a route between Elmira, N. Y., and Ithaca. The decision also authorizes the Greyhound Corporation, Central's parent, to acquire control of the rights involved.

In the latter connection, the commission noted that the Greyhound Corporation now owns 72.73 per cent of Central's outstanding Class B voting common stock, and that N. Y. C. owns the remainder. Greyhound owns all of the Class A voting stock and all of the preferred stock outstanding. This set-up has come about since the date of the first hearing in the proceeding (October, 1944) when Greyhound owned 55 per cent of Central's Class B voting common stock, the remaining 45 per cent having been owned by the railroad which also had an option to purchase 100,000 of the 200,000 shares of the Class B common. In concluding that Central is not now affiliated with the railroad within the meaning of section 5(6), the commission had this to say:

"The instant record bears out applicants' contention that Central's operations are managed and controlled primarily by Greyhound and its officials, and that the top policy matters are determined by the latter without influence or attempted domination by the railroad through its representatives or otherwise. Illustrations of that record indicate that suggestions of the railroad's representatives at board meetings looking toward increased dividend payments have been outvoted or not followed by Greyhound representatives; and, in other instances, the railroad itself has opposed expansion of Central's bus service before local authorities, which expansion was supported by Central's board of directors, including the railroad representatives."

Also, the Division recalled that on "a substantially similar set of facts" it affirmed in November, 1945 (*Railway Age* of December 1, 1945, page 913) a prior finding (*Railway Age* of May 13, 1939, page 848) to the effect that another stock-controlled subsidiary of Greyhound, Northland Greyhound Lines, "was not affiliated with the Great Northern even though the latter owned approximately 45 per cent of its stock and had four of nine representatives on its board of directors."

The majority report represents the view of Commissioners Porter and Mahaffie, while Commissioner Miller filed a dissenting-in-part expression. He agreed with the approval of the acquisitions, but was unable to subscribe to the majority finding that Central Greyhound is not affiliated with N. Y. C. On that score, Mr. Miller turned up another prior report (not cited by the majority) "which is the latest commission view on the question of affiliation" and "is controlling in this proceeding."

It was the July, 1943, decision wherein the entire commission found the Southwestern Greyhound Lines affiliated with the Southern Pacific and St. Louis-Southwestern (see *Railway Age* of July 31, 1943, page 219). "Although the question of affiliation must rest on the facts of each particular case," Mr. Miller continued, "I submit that the facts in the instant proceeding respecting affiliation were more persuasive than those" in the Southwestern case. At the same time, he would have approved the transactions, as noted above, with a holding that the special showing required by section 5(2)(b) had been made.

Disregard of Signals Held Collision Cause

(*Continued from page 236*)

both in service and emergency applications. The brake-cylinder piston travel of the nine cars varied between 6½ in. and 9¼ in. The piston travel of one car only was in excess of 9 in.

A few days after the accident a series of braking tests was conducted with a train comparable in weight, braking ratios and consist to that of No. 39 on the day of the accident. During one test a speed of 81 m.p.h. was attained and a 30-lb. brake-pipe reduction, which was initiated at signal 227.1, stopped the train at a point 395 ft. east of signal 228.1. During the next test, a speed of 85 m.p.h. was reached, and a 30-lb. brake-pipe reduction, which was initiated at signal 227.1, stopped the train at a point 33 ft. east of signal 228.1. During another test, an emergency application made at a point 2,202 ft. east of signal 228.1, where the I.C.C. inspectors said that the first unobstructed view of signal 228.1 can be obtained, stopped the train from a speed of 86 m.p.h. in a distance of 3,529 ft., at a point 1,327 ft. west of signal 228.1, and 393 ft. west of the point of accident. (For a complete description of these tests, see the *Railway Age* of May 11, page 959.)

According to the commission's report the flagman of No. 11 was in the front end of the twelfth car at the time the brakes were applied approaching Naperville and he went immediately to the rear of his train. He said that it was not his practice to drop fuses from a train moving at high speed as the fuses would not remain lighted. However, in tests made after the accident it was found that fuses dropped from trains moving 40 m.p.h. or less would remain lighted. It was also disclosed that although No. 11 was equipped to display an oscillating red light to the rear, the flagman did not operate the switch to energize this light. He did, however, proceed to the rear of his train with flagman's signals immediately after it had stopped.

Signal Ignored—The report said that as No. 39 approached Naperville at a speed of about 80 m.p.h., both enginemen were in the control compartment at the front of the locomotive, and that other members of the train crew were at various locations throughout the cars in the train. Signal No. 227.1 was held to have displayed "approach" for No. 39, which required, according to timetable instructions, that the speed of the train be at once reduced so as to stop short of train or obstruction. "Had this signal been observed and this instruction complied with," the report says, "this accident would have been prevented."

Signal 228.1, which was also passed by No. 39 before the collision, was found to have displayed "stop-then-proceed." Signal 227.1 could be seen from the control compartment of No. 11 throughout a distance of 5,000 ft., and in tests after the accident both this signal and signal 228.1 functioned properly. Examination of the locomotive of No. 39 after the accident disclosed that the brake-valve was in service position and there was no indication of an emergency application of the brakes having been made.

Commenting on the close headway between these trains, the report said that under such conditions enginemen "should be especially alert at all times." However, it added, "an increase of the time interval between these schedules will not necessarily prevent similar accidents, because trains scheduled 15 or more minutes apart at initial terminal can close up until a situation develops similar to the one involved in the accident here under investigation."

Although the report asserted that: "If an adequate train-stop or train control system had been in use and functioning properly, the speed of No. 39 would have been controlled in accordance with the conditions of track occupancy ahead, regardless of any inaction on the part of the engineer, and this accident would have been averted," and said that a cab signal system with an audible warning signal might have prevented the collision, no finding was made in this respect, since the entire matter of railway signal systems is now under consideration in the No. 29543 proceeding.

Concerning the action of the equipment in the collision, the commission's report says: "The thirteenth, or rear car of No. 11, was of conventional all-steel construction, and weighed 160,300 lb. As a result of direct shock in the collision, the center-sills were bent downward about 18 in. at the rear end, and the bend extended to the rear bolster. The first unit of the locomotive of No. 39 was deflected upward; it entered the rear car above the floor level, and the superstructure was destroyed about three-fourths the length of the car. As a result of the upward deflection of the first unit of the locomotive, the buffing members of the rear car did not receive the full force of the collision. A considerable amount of the force was dissipated in the twelfth, eleventh, tenth and ninth cars.

The greatest property damage and practically all the deaths occurred in the thirteenth and eleventh cars. The twelfth car was of conventional all-steel construction, and weighed 169,800 lb. It was not damaged extensively. The eleventh, tenth and ninth cars were of lightweight construction, and weighed, respectively, 115,800, 112,950 and 110,700 lb. The eighth and seventh cars were of conventional all-steel construction and weighed, respectively, 139,700 and 141,800 lb. The eleventh car stopped in reverse direction. It was bent in an U-shape. The section between the body bolsters was demolished, and the sections between the body bolsters and the ends were considerably damaged. The

eleventh, tenth and ninth cars were equipped with tightlock couplers.

Relative Car Strengths—"Examination of the extent of damage to each of the rear five cars of No. 11 directs attention to the comparative capacities of these cars to withstand heavy buffing stresses. Specifications for end-to-end buffing stresses for passenger-train cars were first promulgated in 1912 for railway post-office cars. These specifications required that such cars must be constructed so as to resist buffing stress of not less than 800,000 lb., and this requirement has not been changed. In 1939, the Association of American Railroads recommended to its members certain specifications, based on the existing Railway Mail service specifications, for the construction of passenger cars used in trains of more than 600,000 lb. light weight. These specifications, made standard by the Association of American Railroads in 1945, require that the car structure resist minimum static end load of 800,000 lb. applied on center line of draft without developing any permanent deformation in any member of the car structure. The eleventh car was a dining car built in 1938, and was of stainless steel construction. The center-sill of this car was of stainless steel, with a cross-sectional area of 8.38 sq. in. This is insufficient to meet the specifications recommended by the Association of American Railroads in 1939 and made standard by it in 1945. In recent years similar cars have been constructed with stainless steel center-sills having a cross-sectional area of 18 sq. in. The cross-sectional areas of the center-sills of the tenth and ninth cars were about 40 per cent greater than that of the eleventh car.

Several railroads have in use a total of about 105 cars of the same specifications as the eleventh car in No. 11, and about 20 of these are in use by the C. B. & Q.

"In 1938 the commission investigated a head-end collision between two passenger trains in which there were cars of similar specifications to that of the dining car of No. 11. In that accident as well as the present one, the first car of such specifications in the line of travel of the force of collision received far greater damage than the adjoining cars which were of heavier construction. In both cases there were cars of heavier construction beyond the cars in question, and they received only minor damage.

"The following recommendation was made in the commission's report covering investigation of this 1938 accident:

" 'It is recommended that railroad officials give serious consideration to discontinuance of operation of so-called lightweight cars between or ahead of standard cars unless and until the strength of construction has been determined by suitable tests to be substantially the same as that of other cars with which they are associated.'

"Notwithstanding this recommendation, and also the subsequent action of the Association of American Railroads establishing a minimum requirement of resistance to end-buffing stresses for cars in unrestricted service, cars which do not conform to this standard are continued in operation in association with cars of substantially heavier construction and which meet this minimum requirement. The number of casualties which resulted in this case may have been attributable in part to this condition. Only the three lightweight cars were equipped with tightlock couplers. Had all the cars involved been equipped with tightlock couplers, and had all cars conformed to the standard for end-buffing resistance, it is probable that the disastrous consequences of this accident would have been greatly reduced."

Comment of President Budd—Commenting on the commission's report, Ralph Budd, president of the Burlington, said:

"The Interstate Commerce Commission's report on the Naperville accident includes a recommendation that the Burlington 'discontinue the operation of passenger-train cars which do not meet present standards, intermingled in trains with cars meeting such standards.'

"From the Burlington's 200,000,000 car-miles of experience with lightweight passenger equipment beginning in 1934, and from the designs and actual strength tests, we consider that all of our lightweight cars meet the end-buffing stress requirements to which, apparently, the commission refers as 'present standard.' We shall of course give most careful consideration to the recommendations of the commission.

"The commission's report states the cause of the accident was 'failure to operate following train in accordance with signal indications.' It does not criticise the Burlington operating rules or the functioning of its signal system. It mentions the departure schedule of the two trains (the 'Advance Flyer' and the 'Exposition Flyer'), but says a widening of the interval between them would 'not necessarily prevent similar accidents, because trains scheduled fifteen or more minutes apart at their initial terminal can close up until a situation develops similar to the one involved in the accident'."

Tax Relief on Bond Purchases Extended Another Year

President Truman has signed the recently-enacted bill, H. R. 7052, which extends for another year (through 1947) those provisions of the Internal Revenue Code that permit railroads and other corporations to purchase their own bonds or other evidences of indebtedness at a discount without reporting as income the difference between the principal amount and the purchase price.

Traffic Officers Deny Georgia Discrimination Charges

Railroad rate conference procedures constitute a process of evolution in which freight rate structures have come to meet the changing needs of trade and commerce, Roscoe J. Doss, vice-president in charge of traffic of the Atlantic Coast Line, testified before United States Supreme Court Special Master Lloyd K. Garrison as the state of Georgia's suit against southern and eastern railroads continued in New York.

Mr. Doss attacked Georgia's attempt to prohibit railroads from conferring between and among themselves and with shippers in regard to rates, because, he warned, "the rate structure of this country has become so complicated and so closely inter-related that any disturbance or disruption thereof is conducive to trouble for both the carriers and the shippers."

"The rate conference is the practical and ready solution of the question," he maintained. Pointing out that careful consideration is given freight rates when the Industrial Department of his railroad conducts negotiations looking to the location of industries, Mr. Doss continued: "The Atlantic Coast Line's policy has always been, and continues to be, to provide for such industries rates on a competitive level such as may be necessary for their successful operation. The same careful consideration is given the rate situation whether the prospective industry be a large or small one. In all the years that I have been with the Atlantic Coast Line, I have not known of a single instance where an industry failed to locate along our line by reason of its inability to obtain rates needed for its successful operation."

Mr. Doss stated that neither the Southern Freight Association nor the Association of American Railroads has ever attempted to dictate to the Atlantic Coast Line in rate matters, nor has either at any time tried to restrain his railroad from taking independent action. From 1935 to 1939, inclusive, he said, the Atlantic Coast Line made independent announcements on 47 of the proposals which it had filed with the Southern Freight Association and which had not been approved through the usual association procedure.

William C. Hull, vice-president in charge of traffic of the Chesapeake & Ohio, declared that "for many years the announced position of the eastern railroads has been that they would join in the establishment of through rates from origins in the South to destinations in the East on the eastern basis of rates provided that the southern lines would join in the establishment of the same basis of rates from origins in the East to southern destinations, and provided also that the southern lines would agree to divide all such rates on equal mileage factors."

Pointing out that his railroad by filing a proposal with a rate association affords shippers, receivers and carriers an opportunity to present their views before finally publishing rates, Mr. Hull said that "this is necessary so that those who might be affected by the new rates or the changes in existing rates can explain fully the effect of the proposal upon them and can take such action as they may deem appropriate for the protection of their interests."

"This opportunity to present views," he added, "is also to develop all of the facts relating to the proposal, and to insure compliance with the spirit and purpose as well as with the letter of the Interstate Commerce Act."

Mr. Hull stated that the Chesapeake & Ohio's membership in any rate association "does not curtail or limit the railroad's right of independent action in the establishment of rates which in the railroad's opinion are in the interest of the Chesapeake & Ohio and its shippers." Moreover, he said, the Chesapeake & Ohio has never hesitated to establish rates on independent notice if it thought it was in the interest of the railroad and its shippers

to do so. Citing an instance where the Chesapeake & Ohio put in a reduced rate on bituminous coal over the "vigorous protest" of a number of other railroads, Mr. Hull testified that there were no retaliatory measures of any sort taken against the Chesapeake & Ohio by the railroads which objected to the rate.

The New York, Chicago & St. Louis "has at all times exercised its own judgment as to the rates it established or participated in, and it has not been coerced by anyone or any railroad or association in determining its final action in establishing rates," Sylvester J. Witt, freight traffic manager in charge of rates and divisions, told the special master. Mr. Witt added that his railroad has never by any means undertaken to coerce any railroad or to threaten or punish any railroad for any action that it has or has not taken with respect to the establishment of rates, rules or regulations.

Declaring that if the rate conference procedure were abolished each railroad would have to handle individually rate proposals with the other railroads involved, Mr. Witt stated: "For each railroad to attempt to get the concurrence of every other individual railroad by correspondence or by individual conferences would be an exhaustive task resulting in delays beyond all reason in publishing changes, and in the case of a general rate adjustment, it would be next to impossible to get the rates established."

Whenever eastern railroads have not approved southern freight rate proposals, it has been because they felt that the reductions were not justified in accordance with the facts, said James C. McGohan, freight traffic manager of the Baltimore & Ohio.

Denying that the railroads have pursued policies designed to discriminate against the South, Mr. McGohan said that there are many instances where the rates which the traffic officers of the Baltimore & Ohio determined should be established were published irrespective of the difference of opinion as to their propriety on the part of the officials of other railroads.

"In many such instances," he went on, "the rates suggested by the Baltimore & Ohio after discussion among the roads concerned were acquiesced to by officials who originally held contrary views. In many other instances, the rates were published notwithstanding the fact that other officials persisted in their views that the rates we wanted to establish should not be published, and this also included situations where the highest officers of other lines held views contrary to the views of the highest officers of our railroad."

After citing several typical cases where independent rate action had been taken by the Baltimore & Ohio, Mr. McGohan testified that "no reprisals were ever threatened nor any retaliatory actions ever taken by reason of our having exercised our independent judgment as to what a proper rate should be."

Bids on Pipe Lines

Sixteen proposals to buy or lease the "Big Inch" and "Little Big Inch" pipe lines, which represent a federal government investment of $146,000,000, were opened by the War Assets Administration in Washington, D. C., on July 31. The offers, many of which embraced special conditions for both operating and financing the lines, contemplated both oil and gas transmission, with one proposal outlining a plan for removal of Little Big Inch from its present location and relaying it from Texas to California as a crude petroleum carrier.

W. A. A. announced on August 2 that, after all bids have been reviewed, "the oil proposals will be analyzed first, oil-gas combinations or alternatives second, all-gas third, and any others fourth." The announcement suggested that "some of the proposals may be so indefinite as to preclude their consideration as firm offers." It is understood that W. A. A. would seek specific authorization from Congress before disposing of the lines for use as carriers of natural gas.

Railroaders to Get Refunds of State Jobless Taxes

Railroad employees who paid taxes under state unemployment insurance systems prior to enactment of the Railroad Unemployment Insurance Act in 1939 will have such payments refunded to them under the provisions of a bill finally passed by Congress during the closing days of the recent session and signed by President Truman on August 2. The bill was H. R. 3420.

Its provisions apply to railroad employees living in 10 states, the unemployment insurance systems of which required employee contributions at varying rates for varying parts of the 1936-39 period. Applications for the refunds must be made to the Railroad Retirement Board within 12 months after the law's enactment date.

Equipment and Supplies

LOCOMOTIVES

The National Railways of Mexico is inquiring for 10 steam locomotives of the 2-8-0 type.

FREIGHT CARS

The Atchison, Topeka & Santa Fe is inquiring for 1,750 50-ton all-steel box cars.

The Delaware & Hudson has ordered 400 50-ton gondola cars from the Bethlehem Steel Company. Inquiry for this equipment was reported in the *Railway Age*, May 11, page 977.

The Union Pacific has placed an order with the Pullman-Standard Car Manufacturing Company for 1,000 box cars, to be built at an approximate cost of $5,000,000.

The Western Maryland has ordered 200 40-ft. 6-in. 50-ton steel sheathed box cars from the Bethlehem Steel Company. Delivery will be made early in 1947.

Supply Trade

Paul W. Kimball has been elected president of **American Locker Company, Inc.,** succeeding **Hamilton W. Baker,** whose death was reported in the *Railway Age* of July 20.

Mr. Kimball was graduated from Amherst college and began his career in the

Bachrach
Paul W. Kimball

investment banking business. He later became associated with American Locker and worked in conjunction with the late Mr. Baker in the reorganization of the company. He was appointed senior vice-president in 1931 and also served as treasurer for a number of years. He is a director of the National Automatic Merchandising Association.

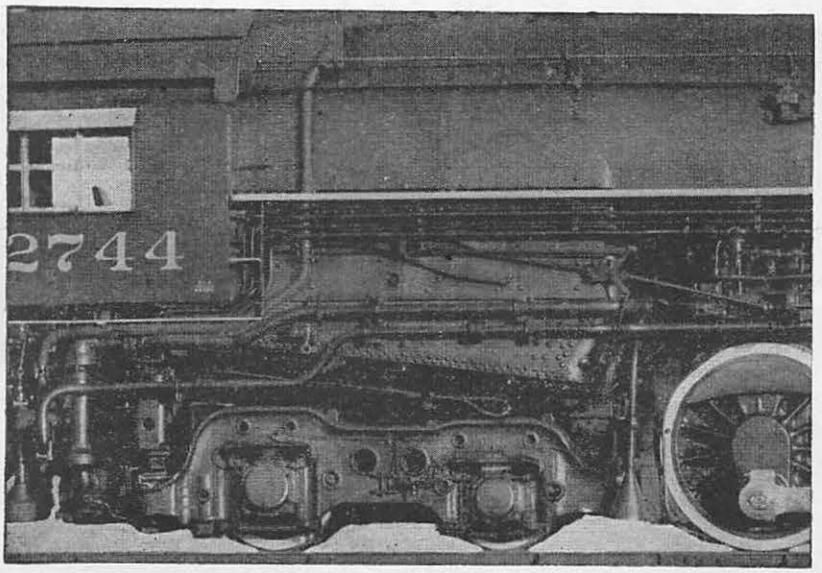
Clifford M. Stoner has been appointed executive vice-president of the **Association of Manufacturers of Chilled Car Wheels.** Mr. Stoner was graduated from the University of Minnesota in 1924, with a degree of bachelor of science in civil

Clifford M. Stoner

engineering. He began his career working on tunnel construction in California and later joined the engineering department of the Elgin, Joliet & Eastern. He was appointed engineer on the staff of the Association of Manufacturers of Chilled Car Wheels in 1934, and in 1937 was placed

News Department continued on second left-hand page

1/5 MORE POWER



FOR 40 ADDITIONAL C & O LOCOMOTIVES

ALL 40 of the recently ordered 2-8-4's for the Chesapeake & Ohio will be equipped with Boosters*. Initial drawbar pull for these 460,000-lb freight locomotives will be almost exactly one-fifth greater because of this supplementary power unit.

The Chesapeake & Ohio is thoroughly familiar with performance of Booster-equipped locomotives — it has equipped more than 200 locomotives with Boosters during the last 22 years and all 50 of its previously ordered 2-8-4's are Booster-equipped.

Greater drawbar pull at speeds up to 25 and 30 mph is of definite advantage — in both freight and passenger service. Investigate the possibility of equipping new *or* existing locomotives with the Franklin Locomotive Booster. Full engineering information is available on request.

**Trade Mark Reg. U.S. Pat. Off.*

FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

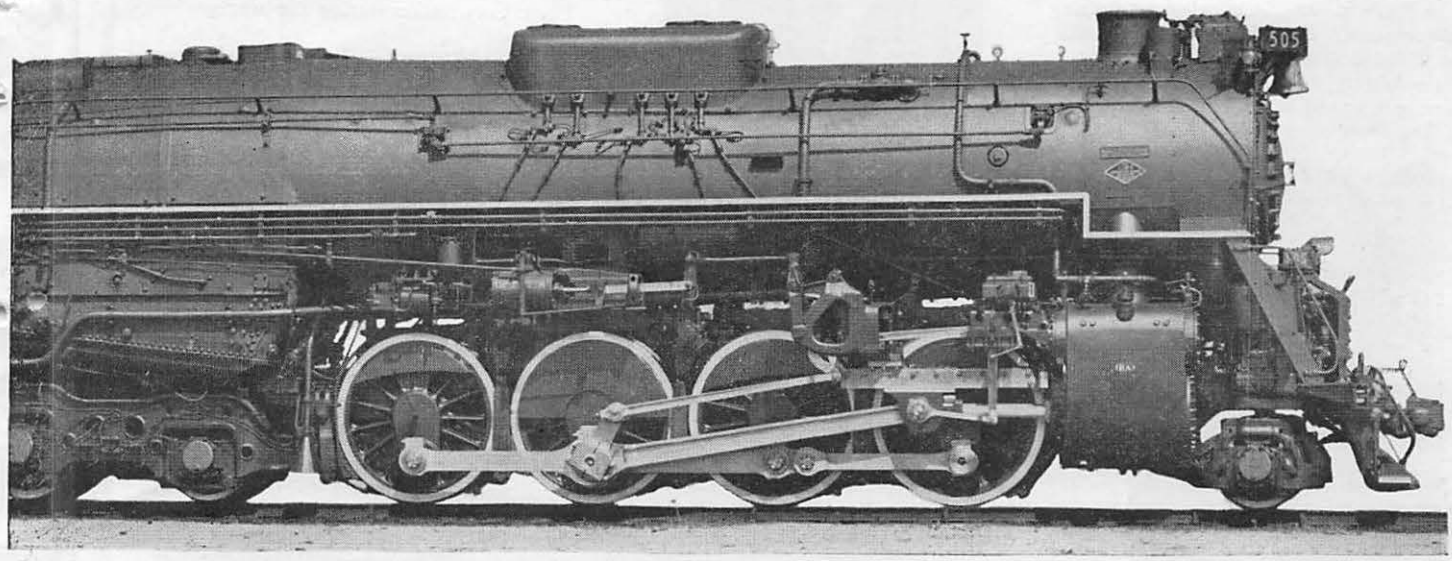
another LIMA-BUILT

LOCOMOTIVE CHARACTERISTICS

Weight on Drivers	295,600
Weight of Engine	460,400
Cylinders	26" x 34"
Diameter of Drivers	69"
Boiler Pressure	245 lbs.
Tender Capacity (Fuel)	42,000 lbs.
Tender Capacity (Water)	25,000 gals.

LIMA LOCOMOTIVE WORKS INCORPORATED

fleet for the VIRGINIAN



The Virginian Railway Company has recently put into operation the first of a fleet of five Lima-built 2-8-4 type steam locomotives. These locomotives will be used to speed up the movement of the Virginian's freight (which was more than 15,000,000 tons last year) by augmenting the railroad's fleet of eight 2-6-6-6 type steam locomotives delivered by Lima in the latter part of last year.

LIMA LOCOMOTIVE WORKS, INCORPORATED, LIMA, OHIO

in charge of engineering, design and statistics. He became director of research in 1942, which position he held until his recent appointment. During the past several years he has served on various committees in the wheel industry and is chairman of the committee on wheel design. He has also represented the Wheel Association before several of the committees of the Association of American Railroads and American Railway Engineering Association on matters involving car wheels.

Kenneth W. Green has been appointed assistant purchasing agent of the **Electric Storage Battery Company,** Philadelphia, Pa., manufacturer of Exide batteries. Mr. Green was graduated from Lehigh university in 1924, as an electrical engineer, after which he took the students' training course at the Bethlehem Steel Company and worked in its electrical department for three years. He joined the sales staff of the Pittsburgh (Pa.) branch of Electric Storage Battery in 1927, where he served for five years, and in 1937 was appointed

Kenneth W. Green

manager of railway sales, later becoming manager of the engineering sales division and the railway division, upon their merger early this year.

Leigh B. Block, vice-president of the **Inland Steel Company,** has been elected a director of the firm, succeeding **J. H. Morris,** who retired recently as secretary of Inland Steel.

The Hewitt Rubber (Buffalo, N. Y.) division of **Hewitt-Robins, Inc.** has announced the moving of its Philadelphia (Pa.) district office and warehouse, from 20 South 15th street to 401 North Broad street, as part of an over-all expansion program to offer greater service assistance and improve deliveries of "Job-Engineered" hose, belting and other industrial rubber products. The new location is under the supervision of **C. F. Holden** and **Jack T. Sheldon,** both of whom have a wide background in the industrial rubber products sales and service field.

Maurice R. Eastin has been appointed eastern zone manager for the railway controls division of the **Minneapolis-Honeywell Regulator Company.** Mr. Eastin was graduated from the University of Illinois in 1935. In the same year he joined the New York Central System as special engineering apprentice and, in 1940, was appointed electrical inspector of that road, with headquarters at Indianapolis, Ind. Entering the United States Navy in 1942, he served in Newfoundland and

Maurice R. Eastin

the United States, until placed on inactive duty as a lieutenant commander U.S.N.R., in 1946. Mr. Eastin holds a patent on an electronic temperature control.

Virgil V. Grant, assistant treasurer of the **Caterpillar Tractor Company,** has been elected treasurer, with headquarters as before at Peoria, Ill., succeeding to part of the duties of **W. J. McBrian,** vice-president, who will devote his entire time to administrative responsibilities in connection with the purchasing and treasury departments.

The transportation seating division of **S. Karpen & Bros.** has opened a showroom and sales offices at 624 South Michigan avenue, Chicago, to be occupied by the George B. Cross Company, exclusive sales agent for Karpen transportation seating. The officers of the company are: George B. Cross, president; B. Williams, vice-president; and R. G. Brooks, treasurer. C. A. VanDerveer, Jr. is the eastern representative. The new offices contain all necessary equipment for viewing the latest in mechanical developments in Karpen transportation seating, and are conveniently located in relation to railroad stations for out-of-town visitors.

John E. Goble, vice-president of the **National Tube Company** (a subsidiary of the United States Steel Corporation), has been elected president of National, succeeding **Charles R. Cox,** who has become president of Carnegie-Illinois Steel Corporation, another U. S. Steel subsidiary. Mr. Goble was born at Margaret, Tex., in 1895, and began his business career as a production worker in oil fields near Petrolia, Tex. After serving in the armed forces during World War I, he returned to the Texas oil fields, serving as a driller until 1925, when he joined the Oil Well Supply Company as South American representative, with headquarters at Maracaibo, Venezuela. In 1929 Mr. Goble was advanced to assistant manager of the export division, with headquarters at New York, and two years later he was promoted to manager of that division, remaining in that position until January 1, 1936, when he was elected vice-president of National.

(News Department continued on next left-hand page)

Financial

CENTRAL OF PENNSYLVANIA.—*Operation.*—This road, a wholly-owned subsidiary of the Central of New Jersey, on August 1 began to operate under lease the lines of the C. of N. J. located in the state of Pennsylvania. Its officers are the same as the parent company's, with William Wyer as president.

KANSAS CITY SOUTHERN-TEXAS & NEW ORLEANS.—*Acquisition.*—These roads have applied to the Interstate Commerce Commission for authority to purchase from the United States government a 5-mile spur line in Calcasieu Parish, La. The applicants propose to jointly operate the line, which was constructed by the Defense Plant Corporation during the war.

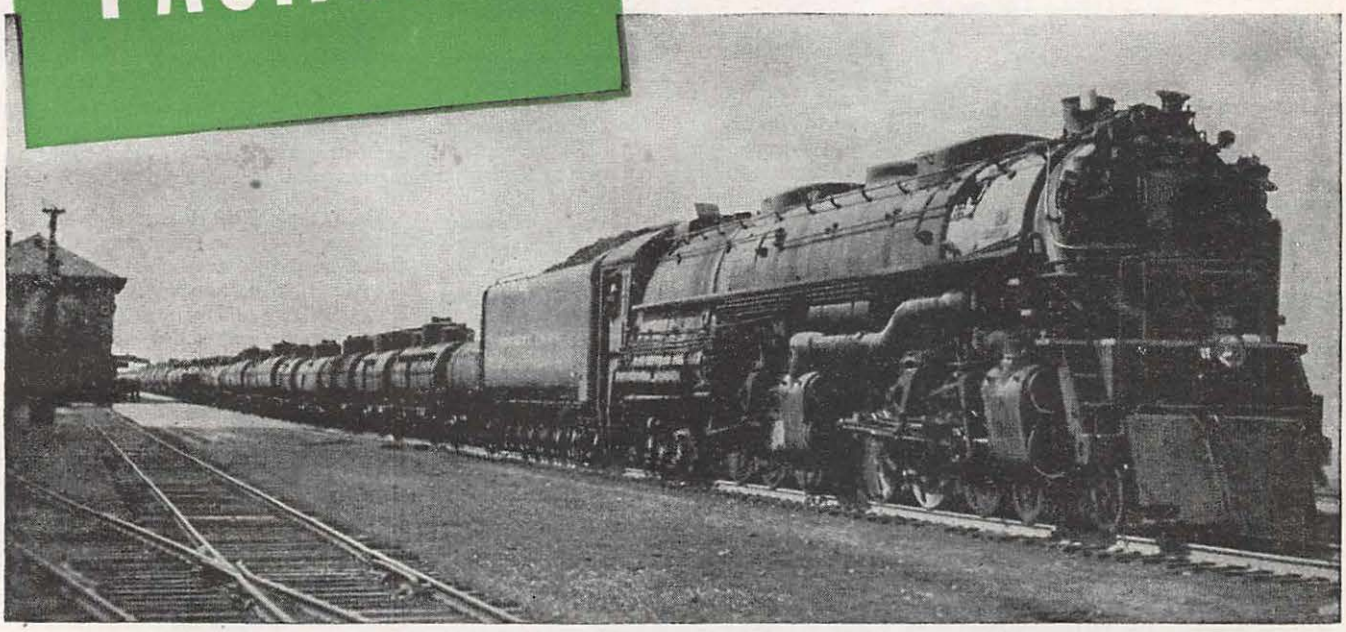
MAINE CENTRAL.—*Acquisition.*—Division 4 of the Interstate Commerce Commission has authorized this road to purchase the properties of the Portland & Rumford Falls Railroad and the Portland & Rumford Falls Railway, which the applicant controls through stock ownership and operates under lease. In approving the transaction, the commission imposed employee-protection conditions as set forth in the Interstate Commerce Act's section 5(2). At the same time, the commission authorized this road to assume liability for $271,000 of 5 per cent first mortgage sinking-fund bonds of the Portland & Rumford Falls Railway.

MINNEAPOLIS & ST. LOUIS.—*Stock.*—This road has applied to the Interstate Commerce Commission for authority to issue 450,000 shares of common stock to be substituted for present shares on a four-to-one basis. According to the appliccant, the reorganization manager of the old company, the Minneapolis & St. Louis Railroad, estimated in 1939 that the market value of the common stock would be about $12 per share if 150,000 shares were issued. The reorganization plan took longer than anticipated, however, and during that time the earnings of the company increased. The stock opened at approximately $37 per share on December 1, 1943, and has sold above $90 per share this year. The road commented that its present capital structure is in a much stronger position than was contemplated in 1939 and that "it is desirable to increase the number of shares so that the market price per share will be in the $20's or $30's."

NORFOLK SOUTHERN.—*Refunding.*—This road has applied to the Interstate Commerce Commission for authority to sell, without competitive bidding, to five insurance companies $3,200,000 of 3 per cent first mortgage Series B bonds, the proceeds of which, together with treasury funds, would be applied toward the redemption of $3,393,300 of outstanding 4½ per cent first mortgage series A bonds, due July 1, 1998. The proposed issue, arranged through Hemphill, Noyes & Company, would be sold to the Connecticut Mutual Life Insurance Company, Hartford, Conn.; the New England Mutual Life Insurance Company, Boston, Mass.; the Massachusetts

NORTHERN PACIFIC'S TWENTY-SIX 4-6-6-4s

(CLASS Z-7 and Z-8)



are equipped with

8 Security Circulators each

Eight Security Circulators, in the firebox of each Class Z-7 and Z-8 Northern Pacific 4-6-6-4, aid in maintaining top efficiency in the performance of these giant locomotives.

The Circulators improve the circulation of water over the crown sheet and in the side waterlegs, and reduce honeycombing, flue plugging and cinder cutting.

They also permit the use of a 100% arch, and lengthen the life of the arch brick.

AMERICAN ARCH COMPANY, INC.

NEW YORK • CHICAGO

SECURITY CIRCULATOR DIVISION

Mutual Life Insurance Company, Springfield, Mass.; the Mutual Benefit Life Insurance Company, Newark, N. J.; and the Guardian Life Insurance Company, New York. The applicant said the series A bonds would be redeemable at 103 per cent, while the series B bonds would be sold at 100 per cent of principal. It further advised that its redemption plan provides for the setting aside of $140,000 a year for interest and amortization of the new bonds, which, it said, will result in the complete payment by 1986 of the company's entire first mortgage indebtedness. The company said the plan will result in net cash savings of approximately $630,828.

PENNSYLVANIA. — *Trackage Rights.* — This road has applied to the Interstate Commerce Commission for authority to acquire for a period of five years trackage rights over the Baltimore & Ohio—between Indiana, Pa., and Cummings, and between Creekside, Pa., and Coal Run, a total distance of approximately 23 miles—in order that it may serve two coal mines in that locality. The applicant said it expects to transport 4,000 cars of coal and coke a year from the two mines and will pay the B. & O. $15 for each car operated over the latter's track. It estimated that transportation of the fuel would result in gross revenues of $564,000 annually and estimated its operating expenses at $495,000 a year.

PENNSYLVANIA.—*Equipment Trust Certificates.*—Making a supplemental report in Finance Docket No. 14978, Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for an additional $7,322,000 of 1⅞ per cent series Q equipment trust certificates, the proceeds of which will be applied toward the payment of $22,669,974 for equipment which the applicant proposes to purchase. As reported in *Railway Age,* August 4, 1945, page 234, the prior report authorized the road to assume liability for $10,290,000 of 1.86 per cent series Q equipment trust certificates, the proceeds of which also will be applied toward the payment of the same equipment. The new issue will mature in 14 installments of $532,000 each starting July 1, 1947. The decision authorizes sale of the certificates at 100.528, the bid of Salomon Brothers & Hutzler, representing itself and Stroud & Company, Inc., which had been accepted subject to commission approval. On this basis, the average annual cost will be approximately 1.8 per cent.

WISCONSIN CENTRAL. — *Reorganization Plan.*—Examiners Homer H. Kirby and Harvey H. Wilkinson have recommended in a proposed report that the Interstate Commerce Commission approve for this road a plan of reorganization under which the preferred and common stockholders would be wiped out, the capitalization being reduced from $71,860,578 (exclusive of $18,088,440 accrued and unpaid interest on debt) to $47,176,664. The recommended capitalization and charges are as follows:

	Amount	Annual Requirements
Equipment obligations (undisturbed)	$ 709,378	$ 24,095
First-mortgage 4 per cent 50-year bonds	9,334,650	373,386
General mortgage 4½ per cent 75-year bonds	12,118,200	545,319
Sinking funds		107,264
Total	$22,162,228	$1,050,064
Common stock (no par value)	25,013,436	
Total capitalization	$47,175,664	

The $9,334,650 of new first mortgage bonds includes $246,000 of Marshfield & South Eastern fixed-interest bonds to be left undisturbed. The first-mortgage bonds, other than those, would bear contingent interest, which would be fully cumulative. The general mortgage bonds would bear contingent interest, cumulative up to a maximum of 13½ per cent. The no-par stock would have a stated value of $100 per share.

Provision is made for the allocation of the top-ranking new securities as between first liens on fixed property and first liens on equipment should the court hold that the debtor's first and refunding mortgage constitutes a first lien on all or a portion of the debtor's equipment. Should the court so hold, provision is made for the issuance of preferred stock in place of common stock, in an amount sufficient to fill out the claims of the debtor's first general mortgage bondholders remaining unsatisfied by distribution of the new bonds. The same treatment would be accorded the debtor's first and refunding mortgage bondholders for that portion of their claim in respect of equipment unsatisfied with bonds. Property replacement funds, one for equipment and one for fixed property, would be created, so that the new company could make property replacements out of earnings (charged out currently as depreciation), with cash earmarked for that purpose.

Holders of the debtor's first general mortgage bonds would receive cash for 15.323 per cent of their claims, new first mortgage bonds for 36.29 per cent, and new general mortgage bonds for 48.387 per cent of their claims. Holders of Superior and Duluth division and terminal mortgage bonds would receive new common stock for 58.174 per cent of their claims, and the remainder thereof would not be satisfied. Holders of the debtor's first and refunding 4's and 5's would receive new common stock for 77.572 per cent of their claims, the remainder being left unsatisfied. Aside from wiping out the equity holders, the proposed plan makes no provision for general creditors or holders of other claims not entitled to priority over holders of outstanding bonds.

Average Prices Stocks and Bonds

	Aug. 6	Last week	Last year
Average price of 20 representative railway stocks..	61.41	60.78	54.32
Average price of 20 representative railway bonds..	97.44	97.15	97.49

Dividends Declared

Chestnut Hill.—Quarterly, 75¢, payable September 4 to holders of record August 20.

Cleveland & Pittsburgh.—7% regular guaranteed, 87½¢, and 4% special guaranteed, 50¢, both quarterly, both payable September 3 to holders of record August 10.

Delaware & Bound Brook.—Quarterly, 50¢, payable September 10 to holders of record September 3.

Fort Wayne & Jackson.—5½% preferred, semi-annually, $2.75, payable September 3 to holders of record August 20.

Peoria & Bureau Valley.—(Increased), $2.50, payable August 10 to holders of record July 26.

Abandonments

BOSTON & MAINE.—Upon petition of employee organizations, Division 4 of the Interstate Commerce Commission has extended for a period of two years its reservation of jurisdiction with respect to the protection of employees who may be adversely affected by this road's abandonment authorized August 3, 1944, in the Finance Docket No. 14546 proceeding.

ERIE.—Examiner Paul C. Albus has recommended in a proposed report that Division 4 of the Interstate Commerce Commission authorize this road to abandon a portion of its so-called Hoytville branch, extending approximately 13.2 miles from a point near Blossburg, Pa., to Hoytville.

MARINETTE, TOMAHAWK & WESTERN.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon that portion of its line between Kings, Wis., and Harrison, 9.4 miles. In approving the transaction, the commission imposed employee-protection conditions similar to those prescribed in the precedent-setting Burlington case, 257 I. C. C. 700.

NEW YORK CENTRAL.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a portion of its so-called Dolgeville branch from Dolgeville, N. Y., to Salisbury Center, 2.4 miles. In approving this transaction, the commission imposed employee-protection conditions similar to those prescribed in the precedent-setting Burlington case, 257 I. C. C. 700.

Construction

PENNSYLVANIA.—This road has applied to the Interstate Commerce Commission for authority to construct at its expense a 2,355-ft. connection between its wye track at Indiana, Pa., and the main line of the Baltimore & Ohio, in addition to two hold tracks of 1,615 ft. and 1,395 ft., respectively, also to be constructed in the same vicinity. Total cost of the entire project is estimated at $36,805. The proposed construction is part of a plan whereby the applicant also seeks authority to acquire trackage rights over the B. & O. in order to serve mining interests in Indiana County, Pa.

WESTERN PACIFIC.—This road has started an improvement program at Elko, Nev., which will consist of removing the present enginehouse boiler-room and equipment and the erection of a separate boiler-house adjacent to the enginehouse. New equipment will include a B. & W. type H-3 oil-fired, Sterling water tube boiler of 247.3 rated hp., with a standby unit consisting of one 80-hp., Scotch marine type boiler taken from the present boiler room and reconditioned for oil burning. C. C. Moore & Co. will furnish the new boiler, and piping installations will be undertaken by the Stearns-Roger Manufacturing Company, Salt Lake City, Utah. The total cost of the project will be $94,000.

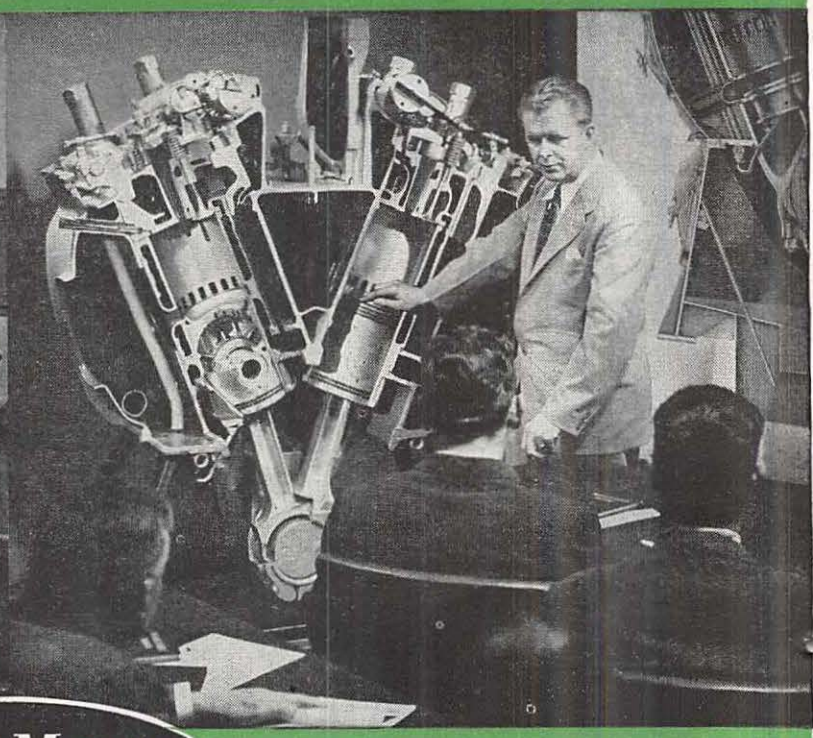
News Department continued on second left-hand page

The *American* Multiple-valve Throttle

... popular the World Over

AMERICAN THROTTLE COMPANY
INCORPORATED
60 East 42nd Street, New York 17, N. Y.
122 S. Michigan Avenue, Chicago 3, Ill.

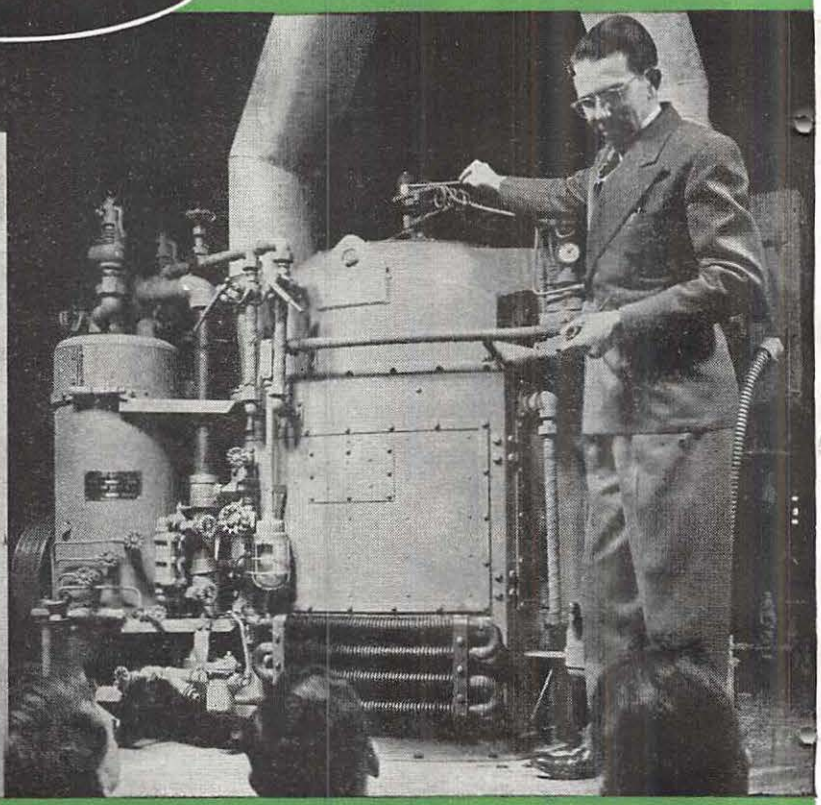
A typical classroom session.



Cutaway sections are extensively used in illustration of lectures.

GENERAL MOTORS
LOCOMOTIVES

Actual equipment is often used to explain operation and maintenance of electrical apparatus.



A very important factor in successful locomotive operation is the steam generator.

Our Interest Does Not End With The Delivery of Your Diesels

YOUR General Motors Diesel locomotives are built to run at peak performance at all times. But, being mechanical, they must be efficiently maintained and operated to assure that high degree of performance.

Our Instruction Car is a familiar sight on customer-railroads the country over. It has given instruction to all classes of railroad personnel. Lower operating costs and higher efficiency have been the result.

The Electro-Motive Diesel Locomotive School at La Grange serves much the same purpose in training the supervisory maintenance and operating personnel of customer-railroads.

Spacious, well-equipped classrooms are provided. Modern teaching aids make the course interesting as well as instructive. Motion pictures, slide films, charts and cut-away equipment are used extensively. Near by in the plant, locomotives in all states of construction are available for observation.

With the additional instructors and classroom facilities now available in the new Service Building, the school is in a better position than ever to serve our railroad customers.

For full details, including a quick day-by-day look at the course, a brief, illustrated booklet is available to any railroad man serving in executive or supervisory capacity. Write to D. H. Queeney, Service Manager, Electro-Motive Division, General Motors, La Grange, Illinois.

This is only one of the plus values that goes with the purchase of General Motors Diesel locomotives.

GENERAL MOTORS LOCOMOTIVES

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS LA GRANGE, ILL.

Railway Officers

EXECUTIVE

Edward A. Ryder, assistant to the general freight traffic manager of the Canadian National, has been appointed assistant to the vice-president in charge of traffic, with headquarters at Montreal, Que., succeeding **J. B. Thom,** whose appointment as European traffic manager at London, England, is noted elsewhere in these columns.

Guy R. Buchanan, whose promotion to assistant to the vice-president of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, was reported in the *Railway Age* of August 3, was born at Thayer, Kan., on May 20, 1893. He began his railroad career with the Santa Fe on March 3, 1910, as a timekeeper at Chanute, Kan., subsequently serving in various capacities, with the same headquarters, until

Guy R. Buchanan

October 1, 1937, when he was promoted to trainmaster at Chanute. Three years later Mr. Buchanan was advanced to division superintendent, with the same headquarters, and in March, 1942, he was transferred to Emporia, Kan. On September 1, 1943, he was advanced to assistant general manager at La Junta, Colo., and on March 1 of this year he was transferred to Los Angeles, Cal., remaining in that location until his new appointment.

C. L. Jellinghaus, vice-president and general manager of the Michigan Central at Detroit, Mich., has been appointed vice-president, with the same headquarters.

A. H. Wright, vice-president and general manager, line Buffalo & East of the New York Central, remains with headquarters as before at New York, as vice-president of the New York Central System.

George H. Smith, whose election to executive vice-president of the Chicago & Eastern Illinois, with headquarters at Chicago, was reported in the *Railway Age* of July 27, was born near St. Elmo, Ill., on March 29, 1891. On February 1, 1910, he entered the employ of the Chicago, Burlington & Quincy, serving as stenographer to the resident engineer in charge of construction of the Burlington line from Herrin, Ill., to Metropolis. On June 21, 1910, he went with the C. & E. I. as a

George H. Smith

stenographer to the division engineer at Salem, Ill. He later held various positions from that of timekeeper to chief division accountant with the same headquarters. He was transferred to the controller's office at Chicago in March, 1916, subsequently serving as traveling accountant. Later he became general accountant, and in March, 1921, was made chief clerk to the controller. On July 1, 1938, Mr. Smith was made assistant controller and on August 1, 1939, he was advanced to assistant to the president. In December, 1942, he was elected vice-president, the position he held at the time of his new appointment.

Carleton W. Meyer, assistant to the president of the New York Central, with headquarters at New York, has resigned, effective August 16, to become vice-president—administration, of the American Bus Lines, with office at Chicago.

G. F. Squires, general superintendent of the Pacific Electric at Los Angeles, Cal., has been promoted to assistant to the president, with the same headquarters, succeeding **C. K. Bowen,** who has retired after 43 years of service.

J. S. Genther, general storekeeper and assistant to general manager of the Lehigh & New England, has been appointed assistant to executive vice-president, with headquarters as before at Bethlehem, Pa., and the posts he formerly held have been abolished.

FINANCIAL, LEGAL AND ACCOUNTING

Irene L. Rieke, chief clerk of the law department of the Minneapolis & St. Louis, has been elected assistant secretary, with headquarters as before at Minneapolis, Minn.

O. S. Braden, assistant to general manager of the Pittsburgh & Lake Erie, has been appointed real estate and tax agent for the Pittsburgh & Lake Erie and the Lake Erie & Eastern, with headquarters as before at Pittsburgh, Pa., succeeding **W. F. Brunner,** who retired on July 31 after 44 years of service.

OPERATING

G. F. Jessup, trainmaster, Cleveland division of the New York Central, has been promoted to assistant to the assistant general manager with headquarters as before at Cleveland, Ohio.

Fred A. Dawson, manager, freight transportation, of the New York Central System has been appointed general manager, line Buffalo and East, with headquarters as before at New York.

Ralph H. Graham, trainmaster of the Southern at Charleston, S. C., has been transferred to Danville, Va., and **G. Selwyn King,** track supervisor at Gainesville, Ga., succeeds Mr. Graham as trainmaster at Charleston.

H. R. Halverson has been appointed superintendent of the Illinois division of the Chicago Great Western, with headquarters at Oelwein, Iowa, succeeding **E. E. Deyo,** deceased. **R. L. Reimer,** trainmaster of the Minnesota division, has been transferred to the Illinois division, with headquarters at Oelwein, replacing **A. A. Freiberger,** who has been assigned to other duties.

T. L. Wagenbach, assistant general superintendent of the Pacific Electric at Los Angeles, Cal., has been advanced to general superintendent, with the same headquarters, succeeding **G. F. Squires,** whose promotion to assistant to the president is reported elsewhere in this issue. **C. H. Belt,** superintendent of instruction and safety, has been promoted to assistant general superintendent, with headquarters as before at Los Angeles, replacing Mr. Wagenbach, and **H. L. Young** has been appointed superintendent of instruction and safety, relieving Mr. Belt.

B. W. Smith, superintendent of safety of the Missouri Pacific at St. Louis, Mo., has been appointed acting superintendent of the Missouri and Memphis divisions and of the Missouri-Illinois railroad West of the Mississippi river, with headquarters at Poplar Bluff, Mo., succeeding **S. Hammer,** who has been granted a leave of absence due to illness. **S. F. Ayler,** trainmaster at Osawatomie, Kan., has been advanced to assistant division superintendent, with headquarters at North Little Rock, Ark. **J. J. McQuade** has been appointed trainmaster, with headquarters at Hoisington, Kan., relieving **J. D. Woodard,** who has been transferred to Osawatomie, replacing Mr. Ayler.

TRAFFIC

E. A. Coons has been appointed general agent of the Union Pacific, with headquarters at San Jose, Cal.

J. B. Jerome, general foreign freight agent of the New York Central, has been appointed foreign freight traffic manager, with headquarters as before at New York,

succeeding **A. E. Baylis**, whose photograph and biography appeared in connection with his advancement to assistant general freight traffic manager, reported in the August 3 issue of *Railway Age*.

Russell E. Blumenstiel, whose appointment as general passenger agent of the Seaboard Air Line at Tampa, Fla., was announced in the *Railway Age* of July 7, was born at Cincinnati, Ohio, in August, 1895. Mr. Blumenstiel entered railroad service in December, 1916, as a ticket seller for the Pennsylvania at Pittsburgh, Pa., transferring to the Seaboard Air Line as ticket seller at St. Petersburg,

Russell E. Blumenstiel

Fla., in January, 1926. He subsequently served as assistant city ticket agent, ticket agent and traveling passenger agent, and was promoted to district passenger agent for the Tampa territory in April, 1943. Mr. Blumenstiel was appointed assistant general passenger agent in November, 1944, and retained this post until his current promotion became effective on July 1.

George L. Oliver has been appointed passenger traffic manager of the Florida East Coast, with headquarters at St. Augustine, Fla.

Marshall H. Schell, district freight agent of the Southern, with headquarters at Raleigh, N. C., has been appointed division freight agent there.

Harold I. Carpenter has been appointed freight traffic agent of the Central of Georgia, with headquarters at Macon, Ga., succeeding **H. V. McCoy**, who has been promoted.

C. G. Black, traffic representative of the St. Louis-San Francisco at Washington, D. C., has been promoted to general agent, passenger department, with headquarters at Atlanta, Ga.

James B. Thom, assistant to the vice-president in charge of traffic of the Canadian National, with headquarters at Montreal, Que., has been appointed European traffic manager, at London, England.

George H. Ingalls, whose promotion to assistant to the freight traffic manager of the New York Central, with headquarters at Cincinnati, Ohio, was reported in the *Railway Age* of August 3, was born at Cincinnati on August 13, 1904, and received his higher education at Harvard University. He entered railway service on November 1, 1927, as a traveling car agent on the New York Central, with headquarters at New York, subsequently serving in various capacities until May 26, 1938, when he was promoted to general agent. On February 1, 1941, Mr. Ingalls was advanced to assistant general eastern freight agent at New York, and on April 16, 1943, he became assistant general freight agent, with headquarters at Albany, N. Y. In October of the same year he was promoted to general freight agent, with headquarters at Washington, D. C., the position he held at the time of his new appointment.

C. E. Heidenburg, acting general agent of the Grand Trunk at Buffalo, N. Y., has been appointed general agent there, succeeding **W. G. Downard**, who has retired after 35 years of service.

W. A. Tuxford has been appointed general agent, passenger department, of the Grand Trunk Western, with headquarters at San Francisco, Cal., succeeding **R. F. McNaughton**, who has retired.

ENGINEERING & SIGNALING

A. B. Chapman, whose promotion to engineer and superintendent of bridges and buildings of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Chicago, was reported in the *Railway Age* of July 13, was born at Elmwood, Neb., on February 24, 1890, and received his

A. B. Chapman

higher education at the University of Washington. He entered railroad service in May, 1919, as a structural draftsman on the Chicago, Milwaukee, St. Paul & Pacific, at Seattle, Wash. From April, 1922, to June, 1929, he served as office engineer at Seattle, and from the latter date until December, 1930, he served as principal assistant engineer on the Seattle Grade Separation Committee. In January, 1931, he was appointed assistant engineer on the Milwaukee, and served in that capacity until April, 1933, when he became a structural draftsman at Chicago, where he was appointed chief draftsman in July, 1938. Mr. Chapman became office engineer at Chicago, in November, 1938. In June, 1942, he was appointed bridge engineer, with headquarters as before at Chicago, the position he held at the time of his recent promotion.

Robert F. Wood, whose appointment as engineer of bridges of the Reading, with headquarters at Philadelphia, Pa., was announced in the July 20 issue of *Railway Age*, was born on October 1, 1890, and was graduated from Lehigh university in 1911. He began his railroad career in July of that year as a backrodman for the Erie at Williamsport, Pa., becoming a levelrodman a year later, and serving subsequently as carpenter and master carpenter. Mr. Wood was named supervisor in 1920, then resign-

Robert F. Wood

ed to serve the New York Central as engineer draftsman from 1923 until 1927, when he rejoined the Reading as assistant engineer at Philadelphia. He was promoted to office engineer there in 1943, and in March, 1946, became acting bridge engineer. His recent advancement became effective June 1.

MECHANICAL

J. N. Martin, superintendent of locomotive shops of the New York Central, at Beech Grove, Ind., has retired after 41 years of service.

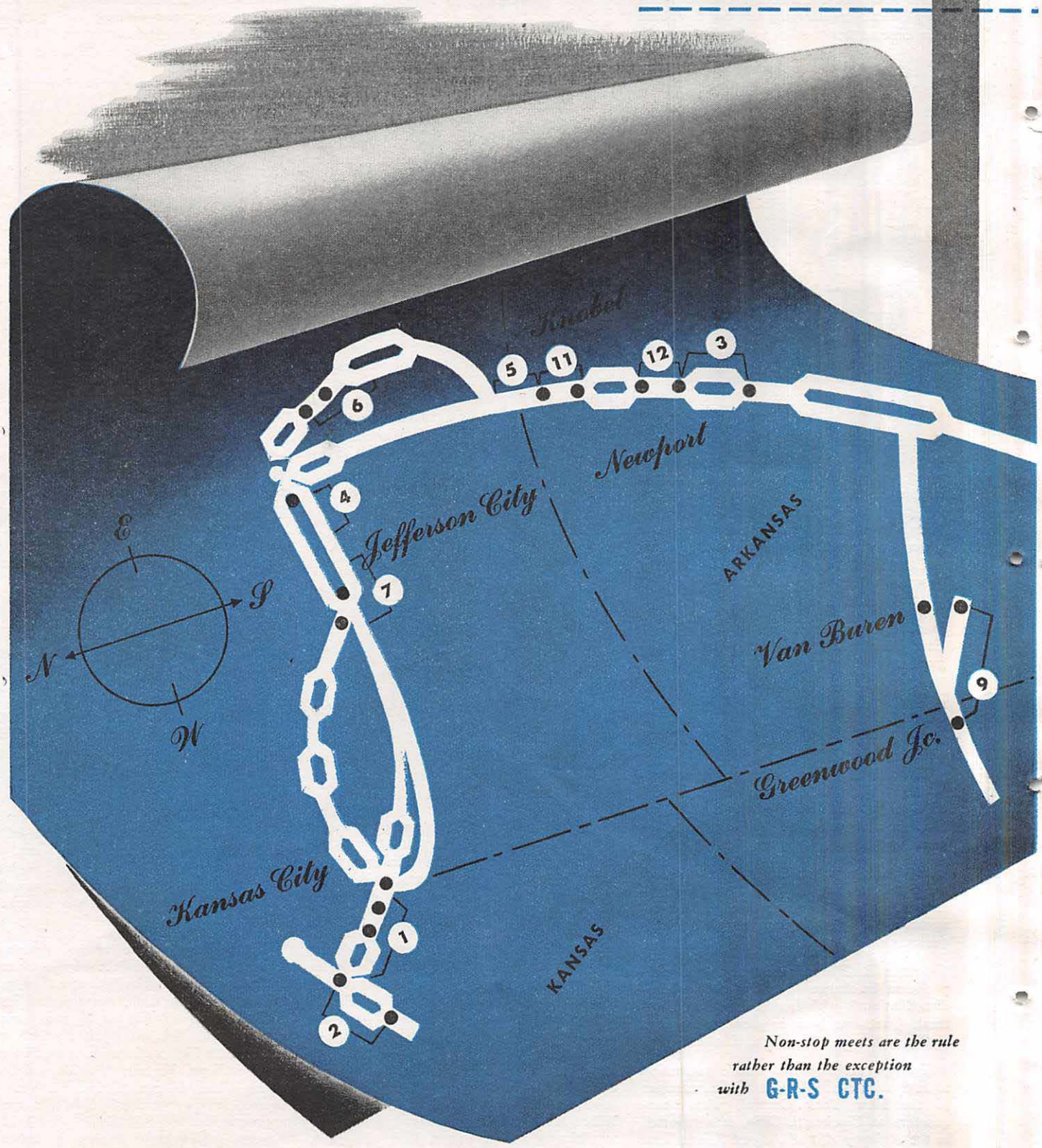
J. Walker has been appointed acting master mechanic of the Missouri Pacific, with headquarters at Nevada, Mo., succeeding to the duties of **E. R. Hanna**, who has been granted a leave of absence due to illness.

W. H. Elsner, chief draftsman of the Great Northern at St. Paul, Minn., has been promoted to mechanical engineer, with the same headquarters, succeeding **N. R. Ross**, who has retired because of ill health.

Frank E. Cheshire, whose appointment as chief mechanical officer of the Chicago, Indianapolis & Louisville, with headquarters at Lafayette, Ind., was reported in the *Railway Age* of August 3, was born at Cumberland, Md., on April 27, 1898, and received his higher education at the Potomac State college, Keyser, W. Va., and the Davis-Elkins college, Elkins, W. Va. He entered railway service in 1915 as a special apprentice of the Baltimore & Ohio at Keyser, subsequently serving as work in-

News Department continued on second left-hand page

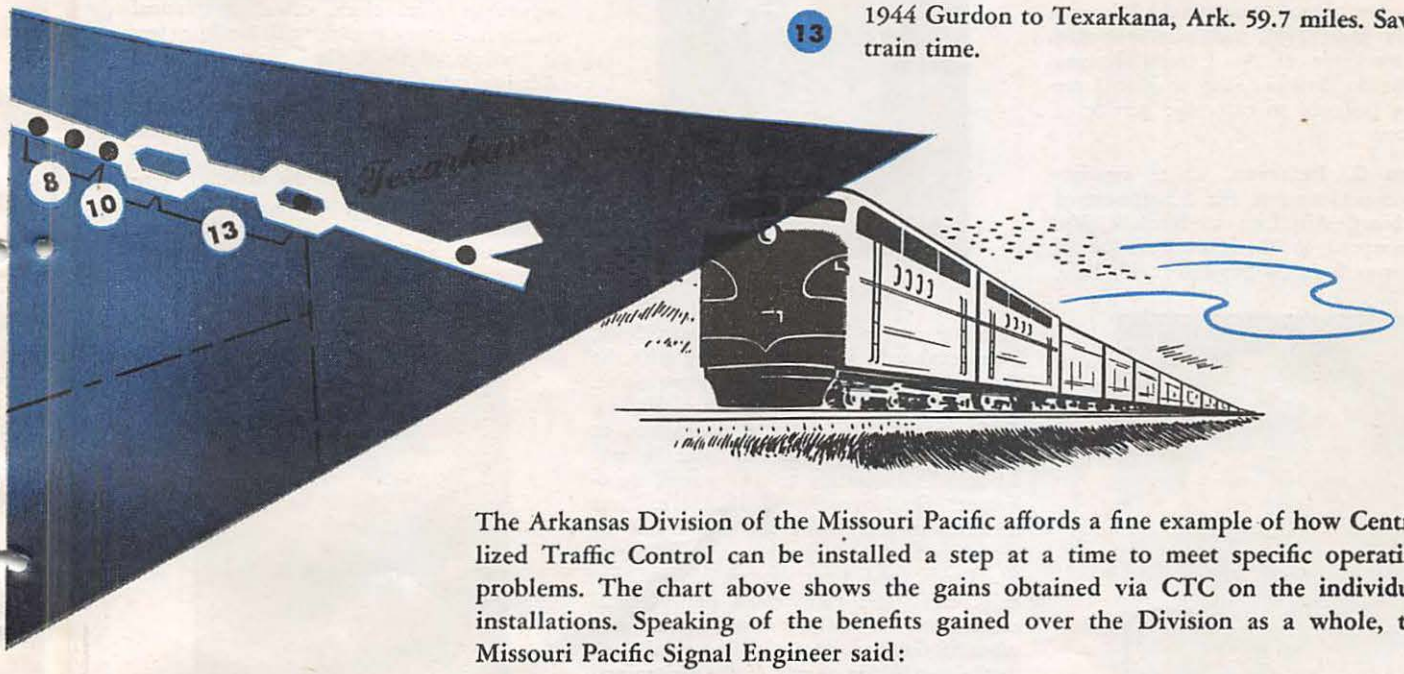
325 MILES ...5 HOURS FASTER



Non-stop meets are the rule rather than the exception with **G-R-S CTC.**

WITH G-R-S CTC
ON THE MISSOURI PACIFIC

1. 1929 Edgewater Junction to Atchison, Kan. 43 miles. Deferred construction of second track.
2. 1930 Atchison to Shannon, Kan. 10.3 miles. Saved 15 minutes per freight.
3. 1930 Diaz to Grand Glaise, Ark. 30 miles. Ended bottleneck.
4. 1931 HD Junction to HI Junction, Mo. 67.4 miles. Added to track capacity.
5. 1937 Poplar Bluff, Mo. to Knobel, Ark. 42 miles. Reduced delays, increased train speeds.
6. 1938 Roots to Raddle, Ill. 28.8 miles. Improved operation during peak loads.
7. 1940 Osage to SR Junction, Mo. 24.5 miles. Replaced two interlockings.
8. 1940 Hot Springs Junction to Etta, Ark. 29.3 miles. Cut train time 50%.
9. 1942 Greenwood Junction, Okla. to Van Buren and Fort Smith, Ark. 10.6 miles. Doubled track capacity.
10. 1943 Etta to Gurdon, Ark. 27.1 miles. Reduced oil train schedule.
11. 1943 Knobel to Walnut Ridge, Ark. 24.8 miles. Increased track capacity.
12. 1943 Minturn to Diaz, Ark. 30.5 miles. Increased train speeds.
13. 1944 Gurdon to Texarkana, Ark. 59.7 miles. Saved train time.



The Arkansas Division of the Missouri Pacific affords a fine example of how Centralized Traffic Control can be installed a step at a time to meet specific operating problems. The chart above shows the gains obtained via CTC on the individual installations. Speaking of the benefits gained over the Division as a whole, the Missouri Pacific Signal Engineer said:

"A comprehensive study of comparable gains has not yet been completed, but it seems safe to say that on the Arkansas Division our trains are getting over our 324.6 miles of roadway about five hours faster than would be possible without CTC."

GRS **General Railway Signal Company**

A-2156

ROCHESTER 2, N. Y. • NEW YORK 17 • CHICAGO 3 • ST. LOUIS 1

spector and assistant foreman at that point. Later Mr. Cheshire was promoted consecutively to repair accountant, shop foreman and general foreman at various points on the road. In July, 1926, he went with

Frank E. Cheshire

the Missouri Pacific as assistant general inspector in the mechanical department, with headquarters at St. Louis, Mo., and one year later he was advanced to general inspector. In March, 1940, Mr. Cheshire was promoted to assistant superintendent of the car department, and in February, 1942, he was furloughed to serve with the armed forces. He returned to the Missouri Pacific in June, 1945, and was appointed master mechanic of the Central Kansas and Colorado divisions, the position from which he resigned to enter the service of the Monon.

Steven G. Peterson, whose appointment as superintendent car department of the Seaboard Air Line at Norfolk, Va. was announced in the *Railway Age* of July 20, was born on September 10, 1900,

Steven G. Peterson

at Perth Amboy, N. J. Mr. Peterson, who attended Cooper Union School of Engineering for one year, entered railroad service in October, 1920, as a draftsman for the New York Central. He transferred his services to the Seaboard, also as a draftsman, in April, 1925, and in May, 1932, became shop engineer at Norfolk. Appointed assistant master car builder for the system in December, 1940, Mr. Peterson was promoted to general foreman of the Portsmouth (Va.) shops in July, 1944, the position he held at the time of his latest appointment.

U. F. Tihen, general foreman, locomotive department, of the Missouri Pacific at St. Louis, Mo., has been promoted to master mechanic, with the same headquarters, succeeding **J. M. Whalen,** who has retired after 60 years of service. **O. L. Hope** has been appointed master mechanic, with headquarters at Osawatomie, Kan., replacing **F. E. Cheshire,** whose appointment as chief mechanical officer of the Chicago, Indianapolis & Louisville was reported in the *Railway Age* of August 3.

PURCHASES AND STORES

Alfred N. Laret, whose promotion to chief purchasing officer of the St. Louis-San Francisco, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of August 3, was born in Crawford County, Kan., on October 11, 1890. He entered railway service in 1906 as a sten-

Alfred N. Laret

ographer on the Frisco at Pittsburg, Kan., later serving in a similar capacity with the Kansas City Southern at the same point. In 1909 he went with the Atchison, Topeka & Santa Fe, also as a stenographer, at Topeka, Kan., and one year later he was advanced to secretary to the general storekeeper. On November 15, 1913, Mr. Laret returned to the Frisco and was appointed secretary to the chief purchasing officer at St. Louis, and later served as assistant chief clerk and chief clerk until federal control of the railroads was established when he was appointed assistant chief clerk to the purchasing agents of the Frisco and the Missouri-Kansas-Texas. On March 1, 1920, he became chief clerk to the vice-president and chief purchasing officer of the Frisco, and on June 1, 1922, he was promoted to assistant to the vice-president and chief purchasing officer. On January 1, 1942, Mr. Laret was advanced to assistant chief purchasing officer, the position he held at the time of his new appointment.

A. G. Denham, assistant general storekeeper of the St. Louis-San Francisco at Springfield, Mo., has been advanced to assistant chief purchasing officer, with headquarters at St. Louis, Mo., succeeding **A. N. Laret,** whose promotion to chief purchasing agent was reported in the *Railway Age* of August 3.

SPECIAL

John A. Neagle, formerly publicity director for the Boston Red Cross, has been appointed public relations representative of the New York, New Haven & Hartford, with headquarters at Boston, Mass.

Fred A. Burroughs, superintendent of the Southern, with headquarters at Hattiesburg, Miss., has been appointed chief personnel officer at Washington, D. C., succeeding **Geeorge H. Dugan,** who has been furloughed to accept the post of carrier representative of the first division, National Railroad Adjustment Board, at Chicago. These changes will become effective on August 16.

John McKenzie Greenwood, whose appointment as general safety agent of the New York Central System at New York was announced in the *Railway Age* of July 13, was born in Chippawa, Ont., on August 2, 1887, and is a graduate of the Niagara Falls Collegiate Institute. He entered railroad service with the New York Central in 1906 as a stenographer in the office of terminal superintendent at Buffalo, N. Y. In 1917 he became secretary of the Buffalo sub-committee of the American Railway Association and in 1918 served as chief clerk, office of terminal manager, eastern region, with headquarters at Buffalo, of the United States Railroad Administration. Mr. Greenwood was appointed chief clerk in the office of the New York Central's general superintendent at Buffalo in 1919, and in 1925 he served in the same capacity to the assistant general manager at Syracuse, N. Y., becoming trainmaster of the Mohawk division later that year, assistant to assistant general

John M. Greenwood

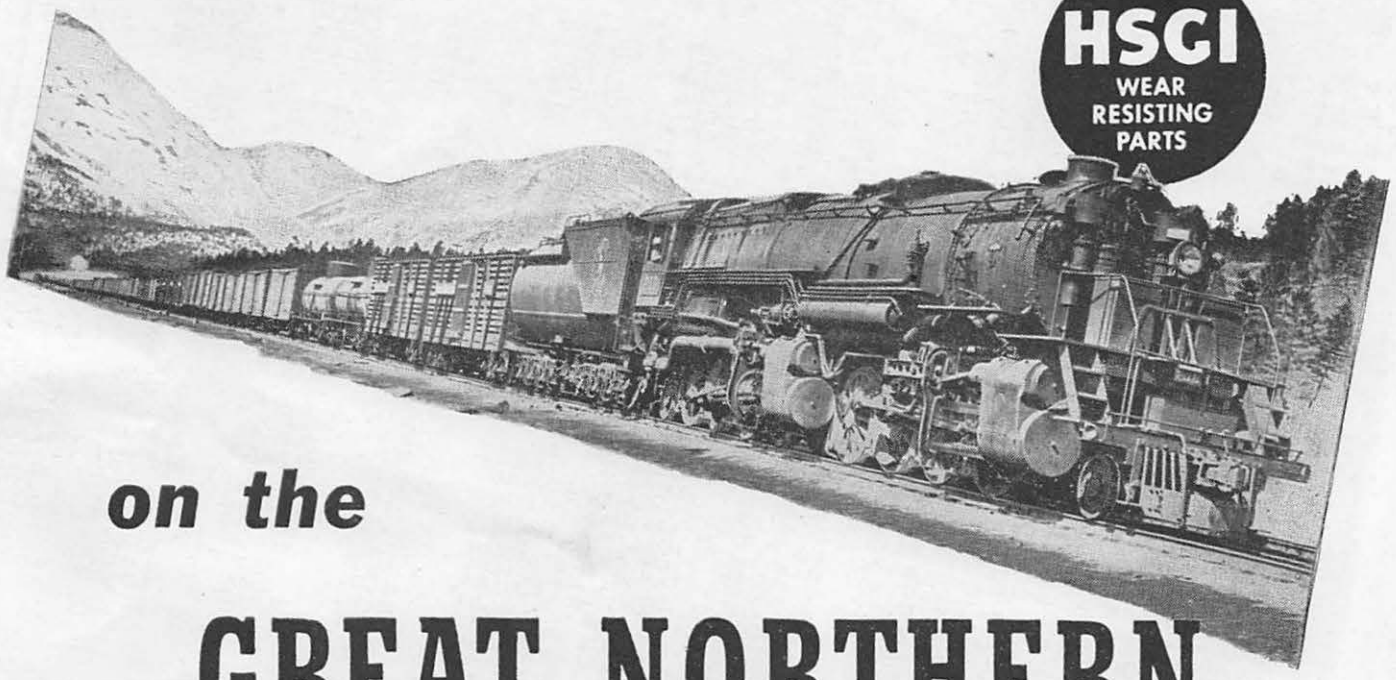
manager at Syracuse in 1936, and superintendent of the Rochester division in 1943, the position he held at the time of his recent appointment, effective July 1.

OBITUARY

Thomas Ahern, who retired in 1931 as assistant general manager of the Southern Pacific, died at his home in San Francisco, Cal., on July 30.

Table of Revenues and Expenses appears on the next left-hand page

HELPING TO MOVE TONNAGE



on the

GREAT NORTHERN

Magnificent realization of Empire Builder James J. Hill's dream, Great Northern has always been important to the life of the Northwest. For much of the time that Great Northern has served the people of six northern states from the Mississippi to Puget Sound and the Pacific, Hunt-Spiller Gun Iron has served Great Northern as a maintenance mainstay for its steam locomotives.

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- (Duplex Springs for Above Sectional Packing)
- Cylinder Snap Rings
- Valve Rings, All Shapes

Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 129 monthly reports of revenues and expenses representing 133 Class I steam railways
(Switching and Terminal Companies Not Included)

FOR THE MONTH OF MAY, 1946 AND 1945

Item	United States		Eastern District		Southern District		Western District	
	1946	1945	1946	1945	1946	1945	1946	1945
Miles of road operated at close of month	227,742	228,289	55,921	56,005	43,282	43,329	128,539	128,955
Revenues:								
Freight	$399,215,110	$625,975,419	$147,200,578	$226,796,983	$78,514,717	$118,002,013	$173,499,815	$281,176,423
Passenger	92,233,101	138,934,743	42,326,534	57,307,889	14,044,209	25,036,216	35,862,358	56,590,638
Mail	10,113,883	10,537,694	3,532,143	3,598,524	1,758,345	1,848,148	4,823,395	5,091,022
Express	4,832,476	14,587,319	*53,418	4,391,463	686,848	2,263,201	4,199,046	7,932,655
All other operating revenues	26,158,798	32,533,079	12,292,524	14,331,734	3,288,308	4,458,964	10,577,966	13,742,381
Railway operating revenues	532,553,368	822,568,254	205,298,361	306,426,593	98,292,427	151,608,542	228,962,580	364,533,119
Expenses:								
Maintenance of way and structures	96,038,564	111,353,860	34,145,607	39,504,066	19,331,545	19,722,382	42,561,412	52,127,412
Depreciation	10,143,597	9,767,685	4,463,058	4,254,146	1,625,621	1,561,236	4,054,918	3,952,303
Retirements	516,916	853,364	167,759	219,204	73,730	122,010	275,427	512,150
Deferred maintenance	*676,605	*666,481	*207,795	*221,071	*18,436	.....	*450,374	*445,410
Amortization of defense projects	41,858	2,217,682	11,984	637,768	18,207	368,275	11,665	1,211,639
Equalization	*1,370,898	*660,448	*842,722	*880,684	124,337	366,776	*652,513	*146,540
All other	87,383,698	99,842,058	30,553,323	35,494,703	17,508,086	17,304,085	39,322,289	47,043,270
Maintenance of equipment	113,255,527	140,781,773	46,815,397	57,069,500	20,116,098	27,437,161	46,324,032	56,275,112
Depreciation	18,542,153	17,978,004	7,900,727	7,610,738	3,664,138	3,589,390	6,977,288	6,777,876
Retirements	*22,090	58,494	*4,593	*7,620	*6,751	*32,977	*10,746	*17,897
Deferred maintenance and major repairs	*497,585	*166,962	*25,465	.....	*74,861	.....	*397,259	*166,962
Amortization of defense projects	715,755	17,689,048	304,919	5,948,207	79,165	4,339,436	331,671	7,401,405
Equalization	253,946	100,073	*13,166	2,596	200,914	79,410	66,198	18,067
All other	94,263,348	105,240,104	38,652,975	43,515,579	16,253,493	19,461,902	39,356,880	42,262,623
Traffic	14,182,455	11,989,499	5,216,511	4,306,369	2,605,852	2,285,241	6,360,092	5,397,889
Transportation—Rail line	240,232,186	256,244,895	103,097,741	111,766,478	41,905,393	43,555,931	95,229,052	100,922,486
Transportation—Water line	.....	130	.....	.....	.....	.....	.....	130
Miscellaneous operations	9,367,567	9,807,836	3,632,136	3,575,752	1,328,348	1,489,833	4,407,083	4,742,251
General	19,125,117	17,275,886	7,628,205	6,798,626	3,640,857	3,329,940	7,856,055	7,147,320
Railway operating expenses	492,201,416	547,453,879	200,535,597	223,020,791	88,928,093	97,820,488	202,737,726	226,612,600
Net revenue from railway operations	40,351,952	275,114,375	4,762,764	83,405,802	9,364,334	53,788,054	26,224,854	137,920,519
Railway tax accruals	32,878,603	154,357,168	13,001,358	35,691,264	6,622,626	33,484,726	13,254,619	85,181,178
Pay-roll taxes	19,881,919	19,718,061	8,089,046	8,106,292	3,701,328	3,459,381	8,091,545	8,152,388
Federal income taxes	*7,947,866	109,910,090	*3,311,430	17,472,270	*1,202,554	24,968,899	*3,433,882	67,468,921
All other taxes	20,944,550	24,729,017	8,223,742	10,112,702	4,123,852	5,056,446	8,596,956	9,559,869
Railway operating income	7,473,349	120,757,207	*8,238,594	47,714,538	2,741,708	20,303,328	12,970,235	52,739,341
Equipment rents—Dr. balance	8,427,375	13,671,510	3,611,540	6,184,364	697,725	641,989	4,118,110	6,845,157
Joint facility rent—Dr. balance	3,825,548	3,452,000	1,883,558	1,743,026	488,914	393,019	1,453,076	1,315,955
Net railway operating income	*4,779,574	103,633,697	*13,733,692	39,787,148	1,555,069	19,268,320	7,399,049	44,578,229
Ratio of expenses to revenues (per cent)	92.4	66.6	97.7	72.8	90.5	64.5	88.5	62.2

FOR FIVE MONTHS ENDED WITH MAY, 1946 AND 1945

Item								
Miles of road operated at close of month	227,785	228,298	55,961	56,007	43,284	43,331	128,540	128,960
Revenues:								
Freight	$2,169,459,016	$2,937,532,786	$821,814,197	$1,098,551,692	$442,539,061	$574,782,309	$905,105,758	$1,264,198,785
Passenger	565,134,620	666,866,868	245,120,462	272,984,132	97,760,073	132,023,722	222,254,085	261,859,014
Mail	51,543,715	52,922,880	17,937,611	17,691,821	8,949,202	9,377,057	24,656,902	25,854,002
Express	37,775,993	69,283,063	3,418,167	20,620,557	6,497,614	10,661,245	27,860,212	38,001,261
All other operating revenues	141,454,906	150,771,477	65,470,076	66,306,385	19,280,227	21,293,132	56,704,603	63,171,960
Railway operating revenues	†2,965,368,250	†3,877,377,074	1,153,760,513	1,476,154,587	575,026,177	748,137,465	1,236,581,560	1,653,085,022
Expenses:								
Maintenance of way and structures	470,194,442	511,392,680	167,377,396	186,356,964	97,971,157	92,712,812	204,845,889	232,322,904
Depreciation	50,036,444	48,485,245	21,727,686	21,241,809	8,061,732	7,791,253	20,247,026	19,452,183
Retirements	2,792,894	2,712,755	590,826	620,752	463,299	584,056	1,738,769	1,507,947
Deferred maintenance	*2,490,153	*2,118,853	*444,777	*543,901	*456,899	.....	*1,588,477	*1,574,952
Amortization of defense projects	102,805	10,693,398	55,707	3,221,369	37,597	1,812,678	9,501	5,659,351
Equalization	11,436,866	16,195,947	6,031,179	8,232,606	2,412,147	4,316,008	2,993,540	3,647,333
All other	408,315,586	435,424,188	139,416,775	153,584,329	87,453,281	78,208,817	181,445,530	203,631,042
Maintenance of equipment	606,125,818	685,116,015	254,698,810	279,157,690	110,157,807	130,964,608	241,269,201	274,993,717
Depreciation	92,182,998	89,393,694	38,955,373	37,703,881	18,374,158	17,903,044	34,853,467	33,786,769
Retirements	*187,111	*77,602	*72,663	*15,719	*59,473	*41,777	*54,975	*20,106
Deferred maintenance and major repairs	*1,742,103	*728,321	*159,403	*10,099	*311,930	.....	*1,270,770	*718,222
Amortization of defense projects	2,993,574	86,832,996	1,321,103	28,882,773	411,259	21,048,602	1,261,212	36,901,621
Equalization	1,474,489	654,087	*46,346	*20,503	1,286,763	530,298	234,072	144,292
All other	511,403,971	509,041,161	214,700,746	212,617,357	90,457,030	91,524,441	206,246,195	204,899,363
Traffic	67,739,665	58,833,941	24,628,104	21,022,072	12,777,497	11,149,097	30,334,064	26,662,772
Transportation—Rail line	1,275,589,739	1,263,610,945	556,959,168	566,835,086	222,983,503	215,064,130	495,647,068	481,711,729
Transportation—Water line	.....	1,125	.....	.....	.....	.....	.....	1,125
Miscellaneous operations	51,140,857	48,046,140	20,022,837	17,681,770	7,338,570	7,561,074	23,779,450	22,803,296
General	97,678,679	86,032,765	38,961,181	34,569,621	19,287,357	16,578,266	39,430,141	34,884,878
Railway operating expenses	2,568,469,200	2,653,033,611	1,062,647,496	1,105,623,203	470,515,891	474,029,987	1,035,305,813	1,073,380,421
Net revenue from railway operations	396,899,050	1,224,343,463	91,113,017	370,531,384	104,510,286	274,107,478	201,275,747	579,704,601
Railway tax accruals	223,092,606	700,167,990	73,149,208	167,852,146	57,024,794	173,854,960	92,918,604	358,460,884
Pay-roll taxes	104,679,393	96,274,796	43,541,781	40,426,217	18,920,798	16,747,838	42,216,814	39,100,741
Federal income taxes	9,651,646	481,568,937	*14,660,022	77,106,555	15,967,512	131,496,936	8,344,156	272,965,446
All other taxes	108,761,567	122,324,257	44,267,449	50,319,374	22,136,484	25,610,186	42,357,634	46,394,697
Railway operating income	173,806,444	524,175,473	17,963,809	202,679,238	47,485,492	100,252,518	108,357,143	221,243,717
Equipment rents—Dr. balance	43,336,272	58,618,520	19,330,677	31,111,568	*811,598	1,131,911	24,817,193	26,375,041
Joint facility rent—Dr. balance	15,866,704	16,977,948	8,170,447	8,485,329	1,954,299	1,840,824	5,741,958	6,651,795
Net railway operating income	114,603,468	448,579,005	*9,537,315	163,082,341	46,342,791	97,279,783	77,797,992	188,216,881
Ratio of expenses to revenues (per cent)	86.6	68.4	92.1	74.9	81.8	63.4	83.7	64.9

* Decrease, deficit, or other reverse item.

† Railway operating revenues are after deduction of $1,122,218 for the five months ended with May, 1946, and $17,356,542 for the five months ended with May, 1945, to create a reserve for land grant deductions in dispute.

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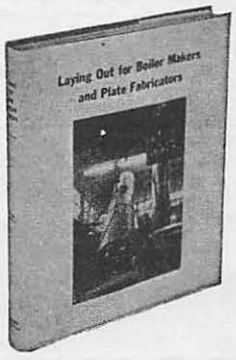

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Index to Advertisers

August 10, 1946

A

American Arch Co., Inc. 26
American Locomotive Company 12, 13
American Steel Foundries 5
American Throttle Company, Incorporated 27

B

Baldwin Locomotive Works, The 8, 9
Barco Manufacturing Co., Not Inc. 10
Bethlehem Steel Company 7, 14

C

Carey Co., Inc., Thomas F. 34
Classified Advertisements 34

D

Delco Products, Division of General Motors Corporation 4
Differential Steel Car Company 35

E

Edgewater Steel Company 22
Electric Industrial Truck Association, The 16
Electro-Motive Division, General Motors Corporation 28, 29

F

Franklin Railway Supply Company, Inc. 23

G

General Motors Corporation, Delco Products Division 4
General Railway Signal Company 30, 31
Get Together Department 34

H

Hunt-Spiller Mfg. Corporation 32

I

Iron and Steel Products, Inc. 34
Iron Mines Co. of Venezuela 34

K

Kerite Company, The 37

L

Lima Locomotive Works, Incorporated 24, 25

M

Miner, Inc., W. H. 3

O

Ohio Locomotive Crane Co. 35
Okonite Company, The 35

P

Purdy Company, The 35

R

Railway Educational Bureau, The 34
Republic Steel Corporation 15
Rust-Oleum Corporation 6

S

Schaefer Equipment Company 11
Scullin Steel Co. 17
Simmons-Boardman Publishing Corporation 33, 35

T

Timken Roller Bearing Company, The ..... Back Cover

U

Union Switch & Signal Company 20
Unit Truck Corporation 2

V

Vapor Car Heating Co., Inc. 35

W

Westinghouse Air Brake Co. 18
Westinghouse Electric Corporation 8, 9
Wine Railway Appliance Company, The ..... Front Cover

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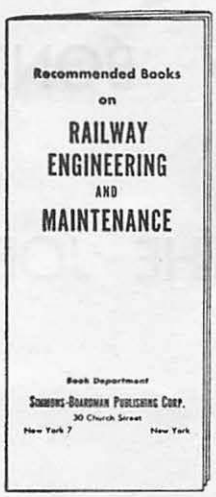

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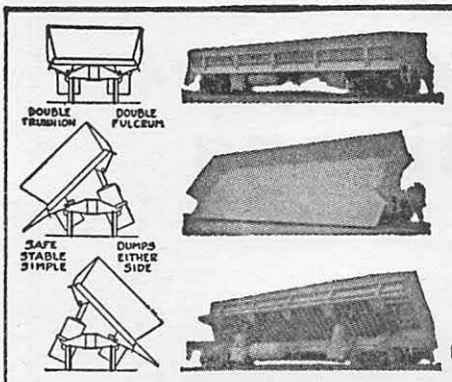

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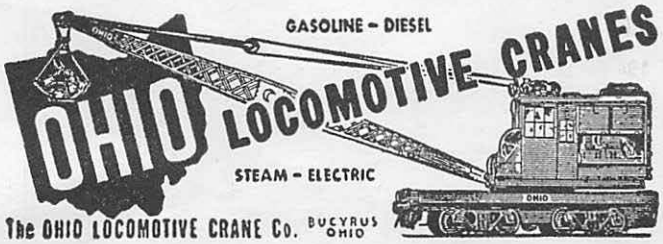

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Index to Advertisers

August 10, 1946

A

American Arch Co., Inc. 26
American Locomotive Company 12, 13
American Steel Foundries 5
American Throttle Company, Incorporated 27

B

Baldwin Locomotive Works, The 8, 9
Barco Manufacturing Co., Not Inc. 10
Bethlehem Steel Company 7, 14

C

Carey Co., Inc., Thomas F. 34
Classified Advertisements 34

D

Delco Products, Division of General Motors Corporation 4
Differential Steel Car Company 35

E

Edgewater Steel Company 22
Electric Industrial Truck Association, The 16
Electro-Motive Division, General Motors Corporation 28, 29

F

Franklin Railway Supply Company, Inc. 23

G

General Motors Corporation, Delco Products Division 4
General Railway Signal Company 30, 31
Get Together Department 34

H

Hunt-Spiller Mfg. Corporation 32

I

Iron and Steel Products, Inc. 34
Iron Mines Co. of Venezuela 34

K

Kerite Company, The 37

L

Lima Locomotive Works, Incorporated 24, 25

M

Miner, Inc., W. H. 3

O

Ohio Locomotive Crane Co. 35
Okonite Company, The 35

P

Purdy Company, The 35

R

Railway Educational Bureau, The 34
Republic Steel Corporation 15
Rust-Oleum Corporation 6

S

Schaefer Equipment Company 11
Scullin Steel Co. 17
Simmons-Boardman Publishing Corporation 33, 35

T

Timken Roller Bearing Company, The .....Back Cover

U

Union Switch & Signal Company 20
Unit Truck Corporation 2

V

Vapor Car Heating Co., Inc. 35

W

Westinghouse Air Brake Co. 18
Westinghouse Electric Corporation 8, 9
Wine Railway Appliance Company, The .....Front Cover

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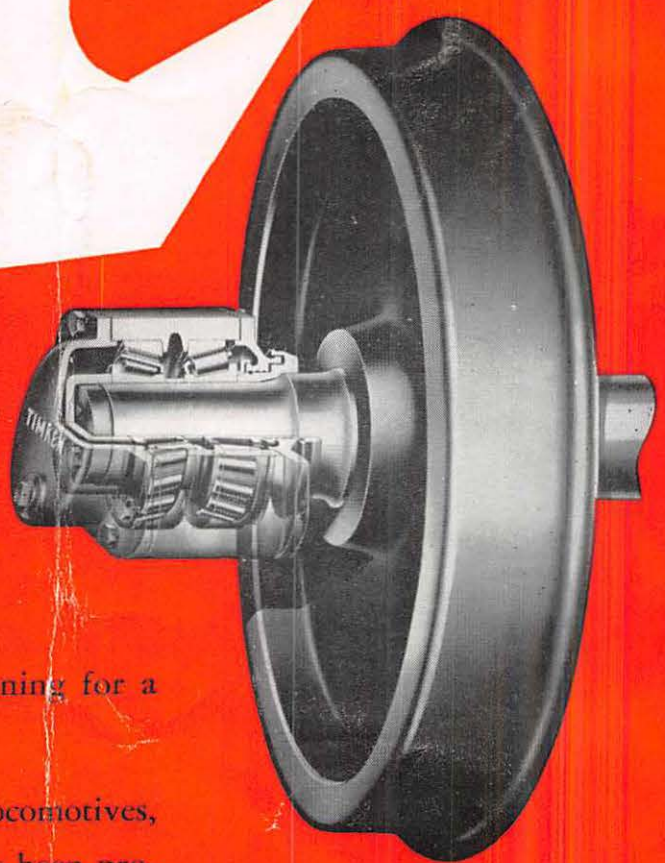

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